ORDER NO. ARD-7808061C

# Service Manual

Cassette Deck

# RS-M85
# RS-M75

Quartz-Locked Direct-Drive Cassette Deck

**Professional Series**

## RS-M85 MECHANISM SERIES

## Specifications (Catalog specifications for sales)

| | |
|---|---|
| Power requirement: | AC; 110/125/220/240 V, 50/60 Hz<br>Preset power voltage; 220 V for Europe<br>240 V for U.K. and all other area except Europe<br>Power consumption; 35 W |
| Motor: | 2-motor system<br>Capstan; 1-quartz control phase-locked DC brushless direct-drive motor<br>Reel table; 1-DC coreless motor |
| Track system: | 4-track 2-channel stereo recording and playback |
| Tape speed: | 4.8 cm/s (1-7/8 ips.) |
| Wow and flutter: | 0.035% (WRMS), ±0.12% (DIN) |
| Frequency response: | $CrO_2$/FeCr tape; 20 ~ 18,000 Hz<br>30 ~ 17,000 Hz (DIN)<br>30 ~ 16,000 Hz ±3 dB<br>Normal tape; 20 ~ 16,000 Hz<br>30 ~ 15,000 Hz (DIN)<br>30 ~ 14,000 Hz ±3 dB |
| Signal-to-noise ratio: | Dolby* NR in; 69 dB (above 5 kHz)<br>Dolby* NR out; 59 dB (signal level = max. recording level, $CrO_2$ type tape) |
| Fast forward and rewind time: | Approx. 80 seconds with C-60 cassette tape |
| Input: | MIC; sensitivity 0.25 mV, applicable microphone impedance 400 Ω ~ 10 KΩ<br>LINE; sensitivity 60 mV, input impedance 68 KΩ<br>DIN; sensitivity 0.25 mV, input impedance 6.4 KΩ |
| Output: | LINE; output level 700 mV, load impedance 22 KΩ over<br>DIN; output level 700 mV, output impedance 1.5 KΩ<br>HEADPHONE; output level 140 mV, load impedance 8 Ω |
| Rec/pb connection: | 5 P DIN type |
| Head: | 2-head system;<br>1-SX (Sendust Extra) head for record/playback<br>1-double-gap ferrite head for erasure |
| Bias frequency: | 85 kHz |
| Dimensions: | 45.0 cm (W) × 9.7 cm (H) × 40.3 cm (D)<br>[17-3/4" (W) × 3-7/8" (H) × 15-7/8" (D)] |
| Weight: | 10.5 kg (23 lbs. 1 oz) |

Specifications are subject to change without notice.

*'Dolby' and the double-D symbol are trademarks of Dolby Laboratories.

**Technics**

**Matsushita Electric Trading Co., Ltd.**
P.O. Box 288, Central Osaka Japan

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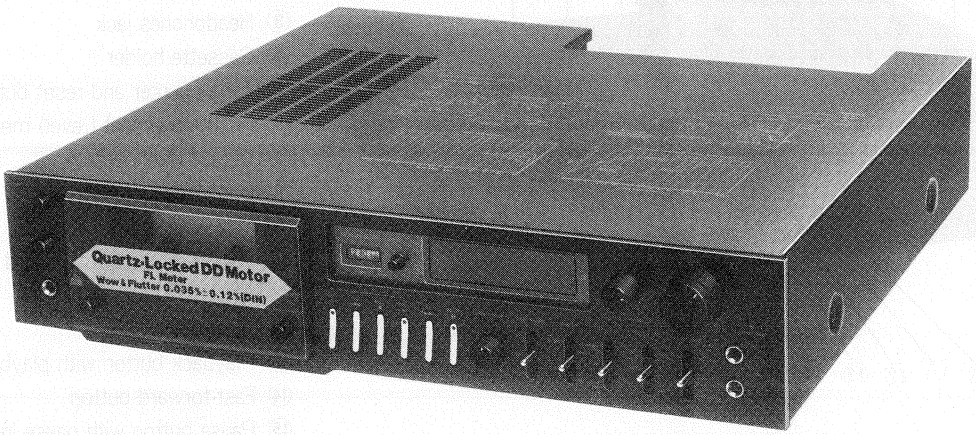


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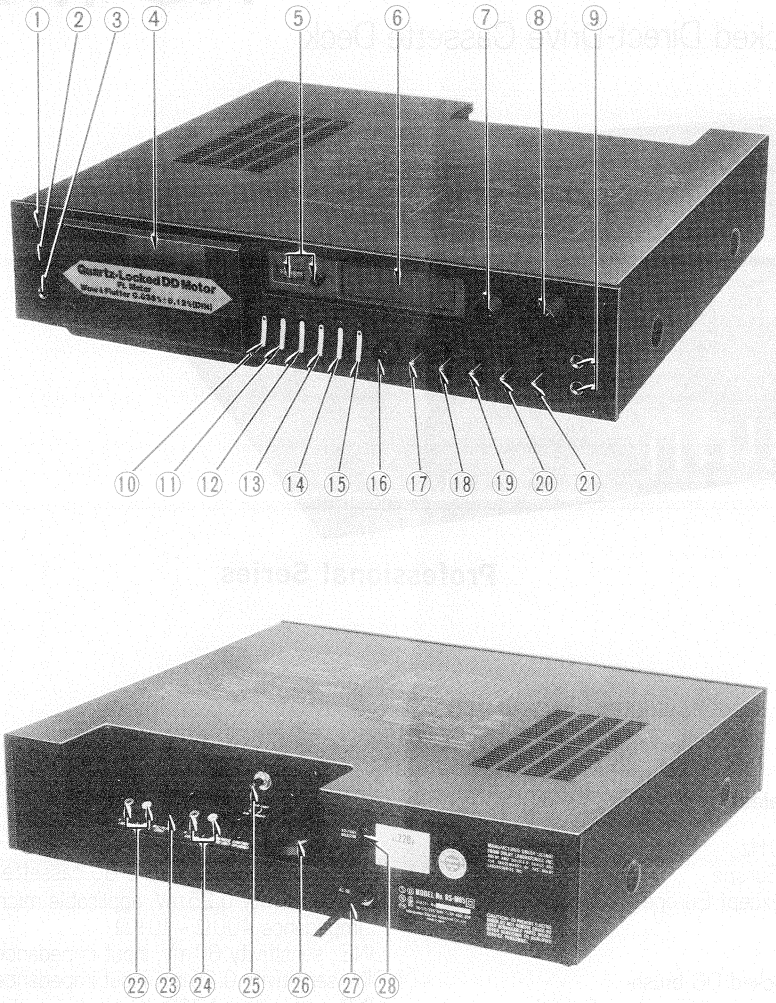
# LOCATION OF CONTROLS AND COMPONENTS



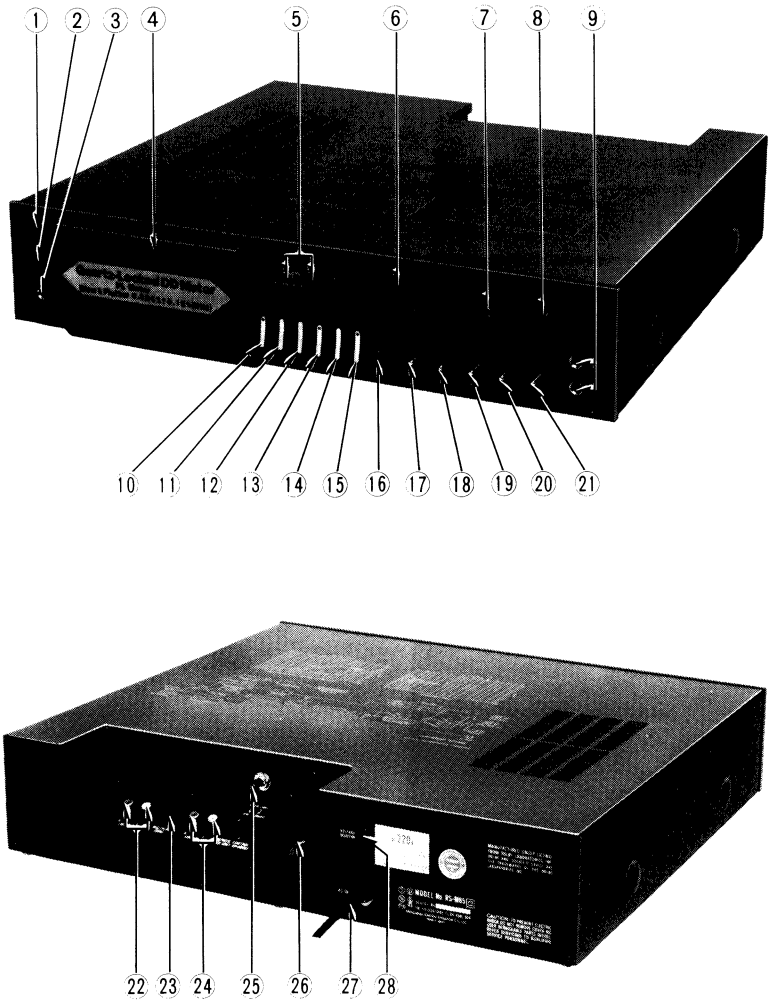

① Eject button
② Power switch
③ Headphones jack
④ Cassette holder
⑤ Tape counter and reset button
⑥ FL (Fluorescent Level) meters
⑦ Output level control
⑧ Input level controls
⑨ Microphone jacks
⑩ Record button with record indication lamp
⑪ Rewind button
⑫ Stop button
⑬ Playback button with playback indication lamp
⑭ Fast-forward button
⑮ Pause button with pause indication lamp
⑯ Bias-adjustment control
⑰ Tape selector
⑱ Meter-brightness/function selector
⑲ Function selector
⑳ Dolby noise-reduction switch
㉑ Input selector
㉒ Line output jacks
㉓ Record/playback connection socket
㉔ Line input jacks
㉕ Meter-brightness-adjustment control
㉖ Remote-control connector
㉗ Power cord
㉘ Voltage selector

Fig. 1

# COMPARISON OF THE MAIN FEATURES BETWEEN MODEL RS-M85 AND RS-M75

| RS-M85 | RS-M75 |
|---|---|
| Quartz-locked servo control system | No |
| Remote control | No |

# LOCATION OF CONTROLS AND COMPONENTS

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# DISASSEMBLY INSTRUCTIONS

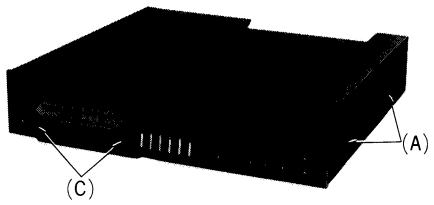


Fig. 2

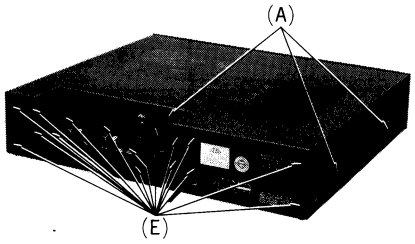


Fig. 3

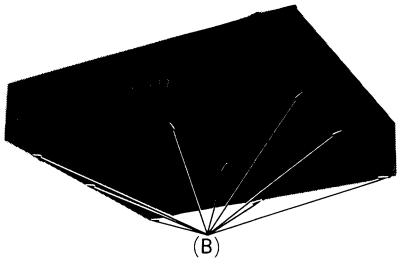


Fig. 4

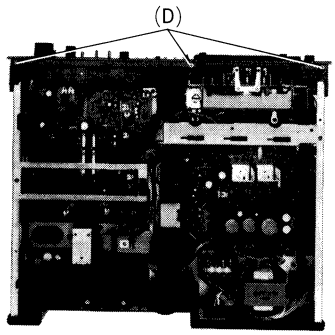


Fig. 5

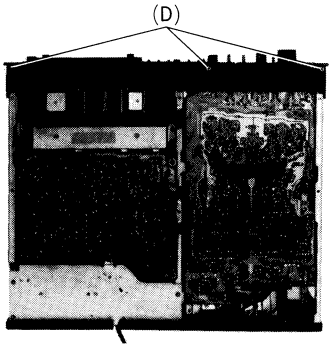


Fig. 6

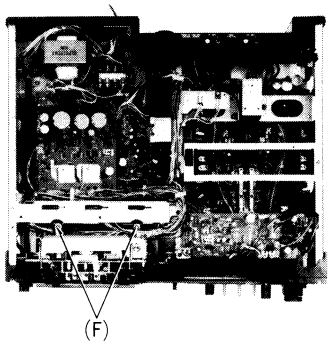


Fig. 7

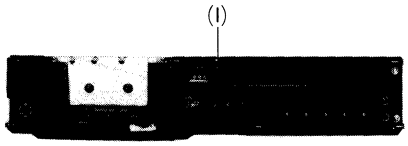


Fig. 8

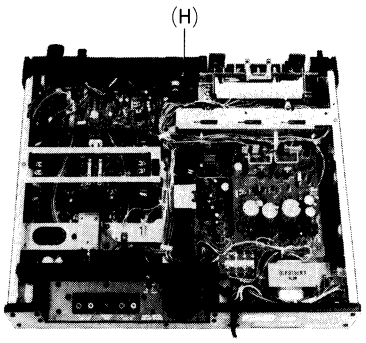


Fig. 9

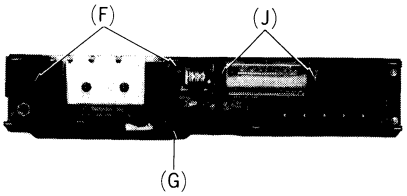


Fig. 10

| Procedure | To remove —— . | Remove —— . | Shown in fig. —— . |
|---|---|---|---|
| 1 | Case cover | • 5 black screws ·····(A) | 2, 3 |
| 2 | Bottom cover | • 9 red screws ·····(B) | 4 |
| 3 | Front panel | • 2 cassette lid holding screws···(C), ※<br>• 6 red screws ·····(D) | 2<br>5, 6 |
| 4 | Back cover | • 16 black screws ·····(E) | 3 |
| 5 | Mechanism | • 4 red screws ·····(F)<br>• 1 black screw ·····(G)<br>• Tape counter belt ·····(H) | 7, 10<br>10<br>9 |
| 6 | FL level meter | • Meter cover ·····(I)<br>• 2 meter holders·····(J) | 8<br>10 |

※ The head azimuth can be adjusted by removing the cassette lid.

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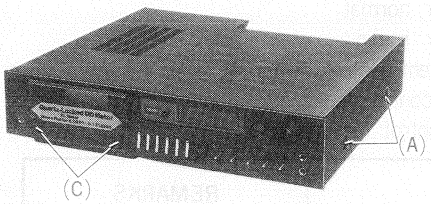


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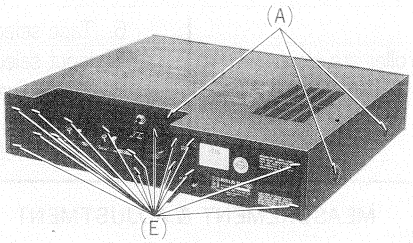


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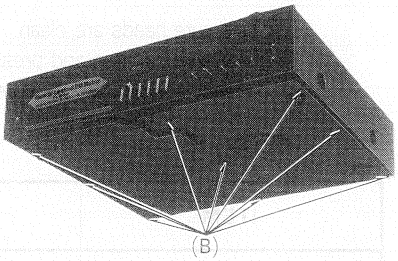


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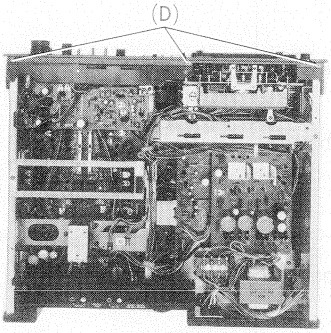


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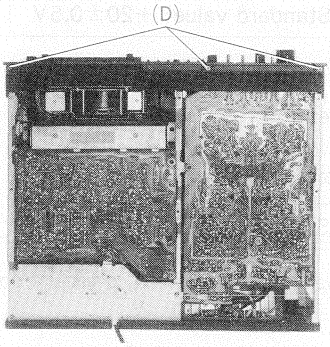


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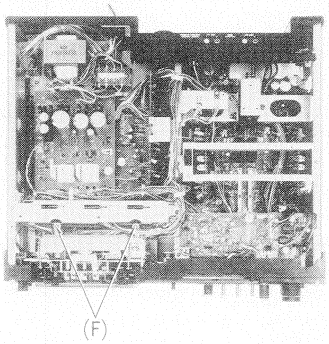


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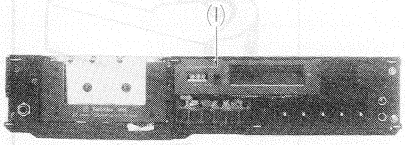


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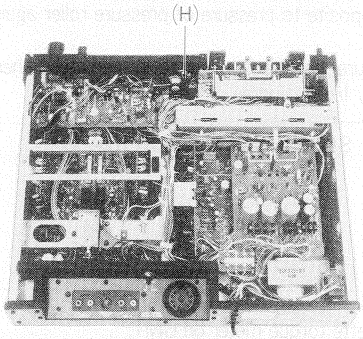


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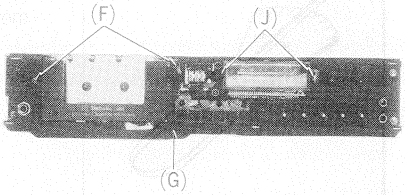


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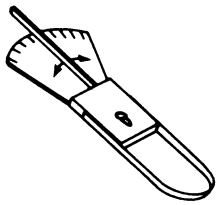
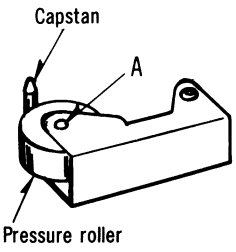
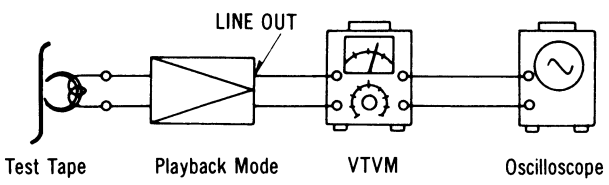
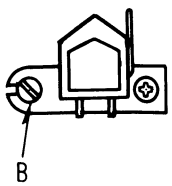
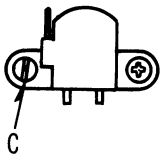
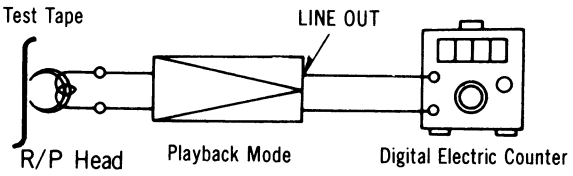
※ The head azimuth can be adjusted by removing the cassette lid.

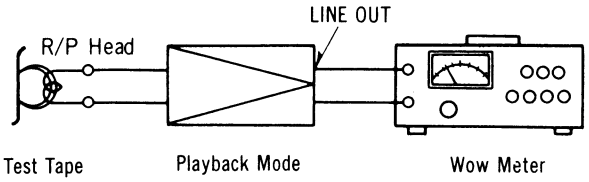
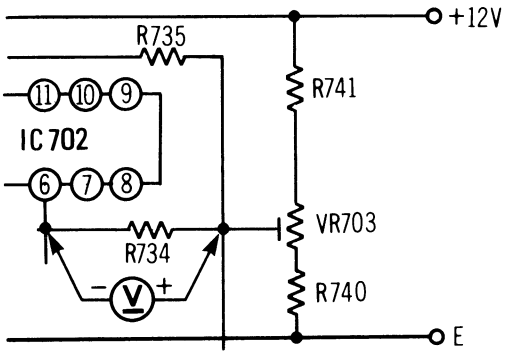
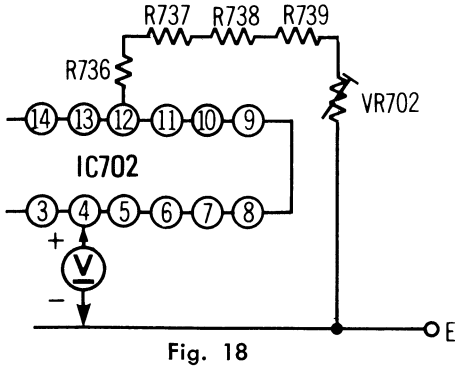
# MEASUREMENT AND ADJUSTMENT METHODS

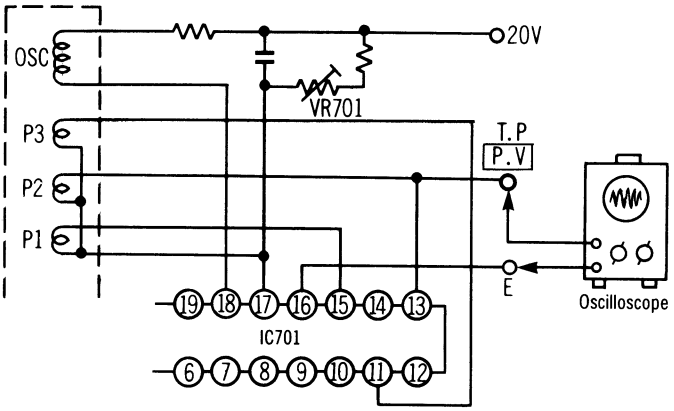
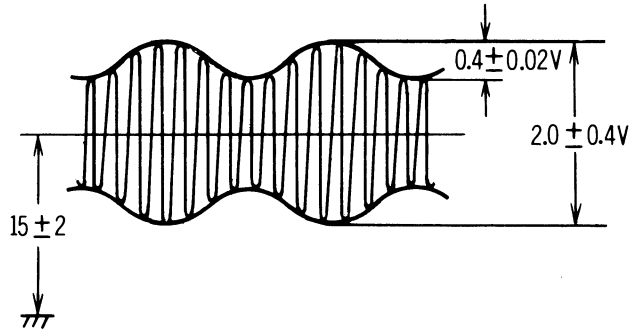
NOTE:

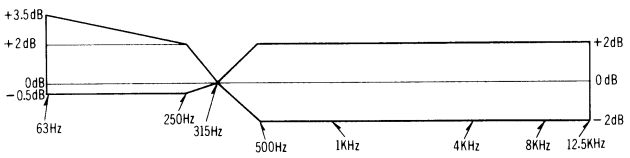
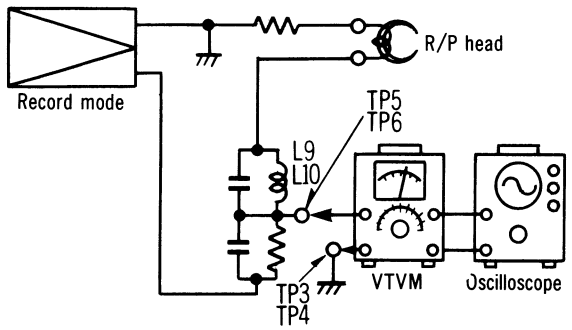
1. Make sure heads are clean.
2. Make sure capstan and pressure roller are clean.
3. Judgeable room temperature: 20±5°C (68±9°F)
4. Meter selector: peak, dim
5. Dolby NR switch: OUT
6. Tape selector: normal
7. Input selector: line in
8. Bias adjustment control: center
9. Output level control: Maximum
10. Input level control: Maximum

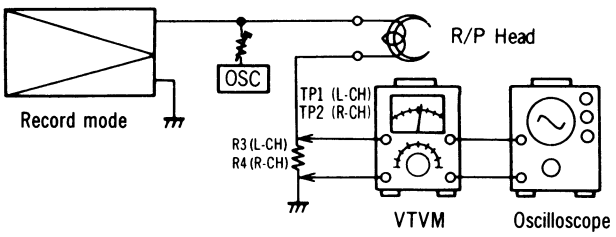
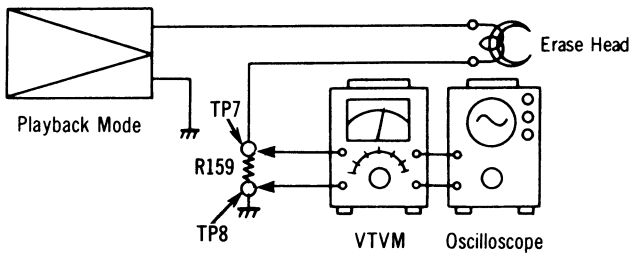
| ITEM | MEASUREMENT & ADJUSTMENT | REMARKS |
|---|---|---|
| **Power supply adjustment** | **+20V adjustment**<br>1. Connect voltmeter to the test point ▼11 on the power circuit board and read voltage.<br>**Standard value: +20±0.5V**<br>2. If measured value is not in standard, adjust VR401 as shown in fig. 31.<br>**+5V adjustment**<br>1. Connect DC voltmeter to the test point ▼12 on the power circuit board and read voltage.<br>**Standard value: +5±0.4V**<br>2. If measured value is not in standard, connect the point [A] on the power circuit board as shown on page 18. | |
| **Pressure of pressure roller**<br>Equipment:<br>* Tension gauge (max. 500gr)<br>  | 1. Place UNIT into playback mode.<br>2. Hook tension gauge to pressure roller shaft top (A), and pull gauge in direction opposite to pressure of pressure roller against capstan (See fig. 11).<br>3. Read pressure indicated on gauge immediately when pressure roller moves away from capstan and stops rotating.<br>**Standard value: 400±30gr** | * Playback mode<br>  <br><br>**Fig. 11** |
| **Takeup tension**<br>Equipment:<br>* Cassette torque meter (QZZSRKCT) | 1. Mount cassette torque meter on UNIT.<br>2. Place UNIT into playback mode and read takeup torque.<br>3. Measure several times and determine the mean value.<br>**Standard value: 45±15gr-cm** | * Playback mode |
| **Head azimuth adjustment**<br>Equipment:<br>* VTVM<br>* Oscilloscope<br>* Test tape (azimuth) ···QZZCFM<br>* Tape path viewer ···QZZCRD | **Record/playback head adjustment**<br>1. Test equipment connection is shown below.<br>  <br><br>**Fig. 12** | * Playback mode<br>R/P head<br>  <br><br>**Fig. 13** |

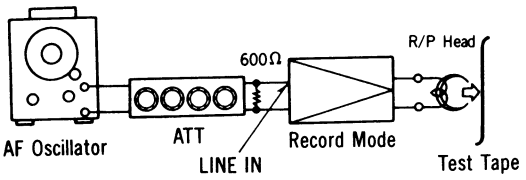
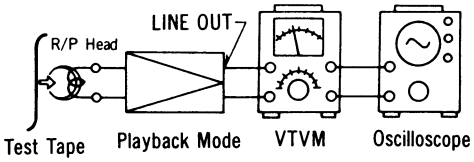
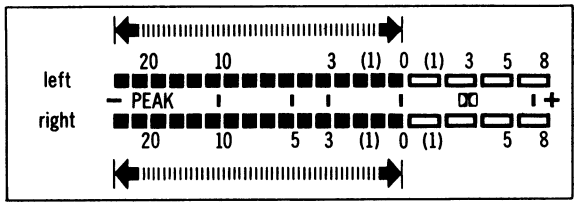
| ITEM | MEASUREMENT & ADJUSTMENT | REMARKS |
|---|---|---|
| | 2. Play azimuth tape (QZZCFM 8kHz).<br>3. Adjust record/playback head angle adjustment screw (B) in fig. 13 so that output level at LINE OUT becomes maximum.<br>4. Measure both channels, and adjust levels for equal output.<br>5. After adjustment, lock head adjustment screw with lacquer.<br>**Erase head adjustment**<br>1. Test equipments connection is the same above but use the tape path viewer (QZZCRD) instead of test tape (QZZCFM).<br>2. Play this tape.<br>3. Adjust screw (C) shown in fig. 14 so that the tape may not get curled or malformed by tape guide of the erase head.<br>4. After adjustment, lock head adjust screw with lacquer. | Erase head<br>  <br>C<br>**Fig. 14** |
| **Tape speed**<br>Equipment:<br>* Digital electronic counter<br>* Test tape···QZZCWAT | **Tape speed accuracy**<br>1. Test equipment connection is shown below.<br>  <br>Test Tape LINE OUT R/P Head Playback Mode Digital Electric Counter<br>**Fig. 15**<br>2. Play test tape (QZZCWAT 3,000Hz), and supply playback signal to frequency counter.<br>3. Measure this frequency.<br>4. On the basis of 3,000Hz, determine value by following formula:<br>$\text{Tape speed accuracy} = \frac{f-3{,}000}{3{,}000} \times 100(\%)$<br>f = measured value<br>5. Take measurement at middle section of tape.<br>**Standard value: ± 0.4%**<br>**Tape speed fluctuation**<br>Make measurements in same manner as above (beginning, middle and end of tape), and determine difference between maximum and minimum values and calculate as follows:<br>$\text{Tape speed fluctuation} = \frac{f_1-f_2}{3{,}000} \times 100(\%)$<br>$f_1$ = maximum value<br>$f_2$ = minimum value<br>**Standard value: Less than 0.3%** | * Playback mode |

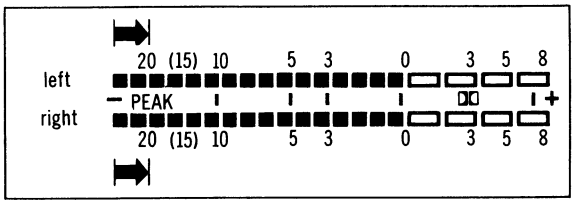
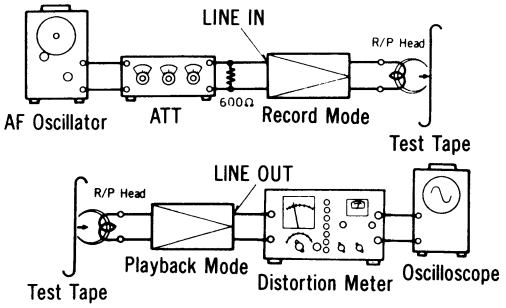
| ITEM | MEASUREMENT & ADJUSTMENT | REMARKS |
|---|---|---|
| **Wow and flutter**<br>Equipment:<br>* Wow meter<br>* Test tape···QZZCWAT | 1. Test equipment connection is shown below.<br>  <br><br>**Fig. 16**<br>2. Use wow test tape (3,000Hz) and measure its playback signal on wow meter.<br>3. Wow and flutter is expressed in percentage and that measurement can be weighted by JIS network (WRMS).<br>4. Measure at middle section of test tape.<br>**Standard value: 0.04% (WRMS)** | * Playback mode |
| **Capstan motor circuit adjustment** | **A. Standard DC power supply voltage adjustment**<br>1. Measure the DC voltage between central point of VR703 and ⑥ terminal of IC702 as shown below.<br>  <br><br>**Fig. 17**<br>**Standard voltage: 0V±0.05V**<br>2. If measured voltage is not within standard, adjust VR703.<br>**B. Phase lock point adjustment**<br>1. Measure the DC voltage between ④ terminal of IC702 and ground as shown below.<br>  <br><br>**Fig. 18** | |

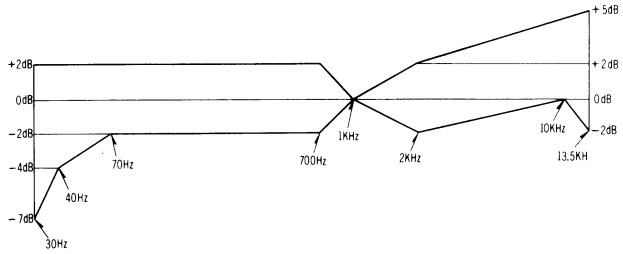
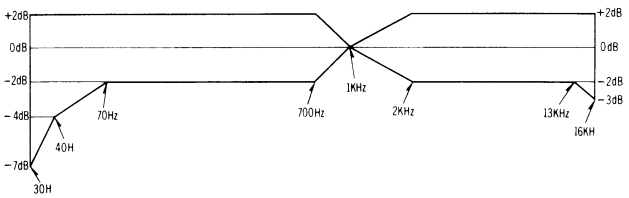
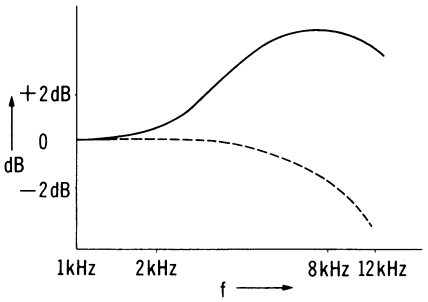
| ITEM | MEASUREMENT & ADJUSTMENT | REMARKS |
|---|---|---|
| | Standard voltage: 5.2±0.1V<br>2. If measured voltage is not within standard, adjust VR702.<br>**C. Position detecting signal output level adjustment**<br>1. Connect oscilloscope to test point (T.P P-V)<br>  <br><br>**Fig. 19**<br>2. Measure the peak-to-peak voltage of position detection signal of test point with the oscilloscope.<br>3. If the measured signal voltage is markedly different from the voltage shown below, make the neccessary adjustment with VR701.<br>  <br><br>**Fig. 20** | |
| **Playback frequency response**<br>Equipment:<br>* VTVM<br>* Oscilloscope<br>* Test tape···QZZCFM | 1. Test equipments connection is as same as "Head azimuth adjustment" but use the test tape (QZZCFM) instead of head azimuth tape (See fig. 12).<br>2. Place UNIT into playback mode.<br>3. Play frequency response test tape (QZZCFM).<br>4. Measure output level at 12.5kHz, 8kHz, 4kHz, 1kHz, 250Hz, 125Hz and 63Hz and compare output level with standard frequency 315Hz, at LINE OUT.<br>5. Make measurement for both channels.<br>6. Make sure that the measured value is within the range specified in the frequency response chart. | * Playback mode<br>* Output level control<br>···MAX. |

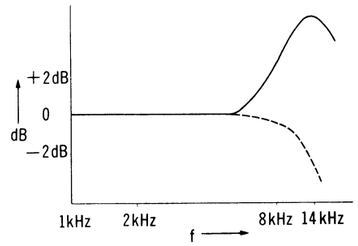
| ITEM | MEASUREMENT & ADJUSTMENT | REMARKS |
|---|---|---|
| | **Playback frequency response chart**<br>  <br><br>**Fig. 21**<br>7. If measured value is not in standard, adjust VR1 (L-CH), VR2 (R-CH) (See fig. 31 on page 12). | |
| **Playback gain**<br>Equipment:<br>* VTVM<br>* Oscilloscope<br>* Test tape···QZZCFM | 1. Test equipment connection is shown in fig. 12.<br>2. Play standard recording level portion on test tape (QZZCFM 315Hz) and, using VTVM, measure the output level at LINE OUT jack.<br>3. Make measurement for both channels.<br>**Standard value: 0.66±0.05V**<br>**Adjustment**<br>1. If measured value is not standard, adjust VR3 (L-CH), VR4 (R-CH) (See fig. 31 on page 12).<br>2. After adjustment, check "Playback frequency response" again. | * Playback mode<br>* Output level control ···MAX. |
| **Playback S/N ratio**<br>Equipment:<br>* VTVM<br>* Oscilloscope<br>* Test tape···QZZCFM<br>* Empty cassette | 1. Test equipment connection is shown in fig. 12.<br>2. Play standard recording level test tape (QZZCFM 315Hz) and read output level on VTVM. Refer to "Playback gain adjustment".<br>3. Place empty cassette (which has been cut) and play again.<br>4. Measure noise level at this time using VTVM, and determine ratio of this level to test tape output signal voltage (315Hz).<br>**Standard value: Greater than 47dB** | * Playback mode<br>* Output level control ···MAX. |
| **Bias leak**<br>Equipment:<br>* VTVM<br>* Oscilloscope | 1. Test equipment connection is shown below (See AMP circuit board on page 14).<br>  <br><br>**Fig. 22**<br>2. Place UNIT into record mode.<br>3. Adjust trap coils L9 (L-CH), L10 (R-CH), so that measured value become minimum (See adjustment parts location on page 12).<br>4. Make adjustment for both channels. | * Record mode<br>* Input level control ···MAX. |

| ITEM | MEASUREMENT & ADJUSTMENT | REMARKS |
|---|---|---|
| **Bias current**<br>Equipment:<br>* VTVM<br>* Oscilloscope | 1. Test equipment connection is shown below.<br>  <br><br>**Fig. 23**<br>2. Place UNIT into record mode, and set the tape selector to normal position.<br>3. Read voltage on VTVM and calculate bias current by following formula.<br>$\text{Bias current (A)} = \frac{\text{Value read on VTVM (V)}}{10\ (\Omega)}$<br>**Standard value: 0.38±0.04mA**<br>4. Adjust VR13 (L-CH), and VR14 (R-CH) (See adjustment part location on page 00).<br>5. Then changing the tape selector to FeCr position measure the bias current.<br>**Standard value: 0.42±0.04mA**<br>6. If measured value is not in standard, adjust VR15.<br>7. Change the tape selector to $CrO_2$ position, measure the bias current.<br>**Standard value: 0.51±0.5mA**<br>8. If measured value is not in standard, adjust VR16. | * Record mode<br>* Bias adjustment control<br>···center |
| **Erase current**<br>Equipment:<br>* VTVM<br>* Oscillocope<br>* Resistor (1Ω) | 1. Test equipment connection is shown below.<br>  <br><br>**Fig. 24**<br>2. Place UNIT into record mode and measure voltage at test point 7.<br>3. Determine erase current with the following formula.<br>$\text{Erase current (A)} = \frac{\text{Voltage across both ends of R159}}{1\ (\Omega)}$<br>**Standard value:**<br>**55±10mA (bias selector···low)**<br>4. If measured value is not within standard, adjust VR12. | * Record mode<br>* Bias adjustment control<br>···center |

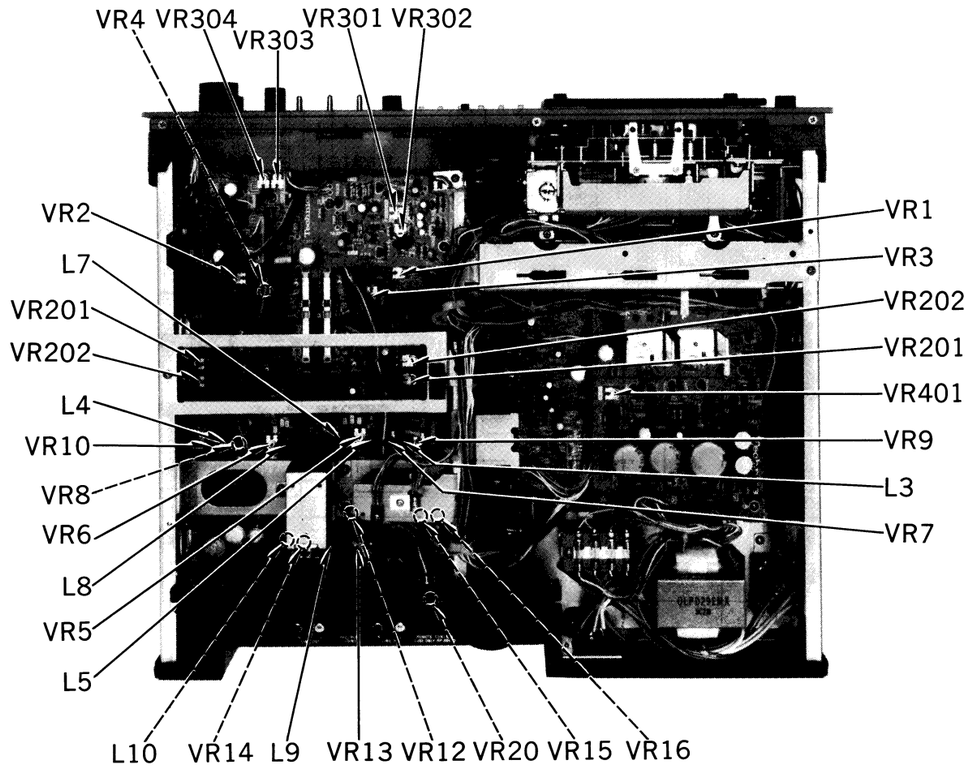
| ITEM | MEASUREMENT & ADJUSTMENT | REMARKS |
|---|---|---|
| **Overall gain**<br>* AF oscillator<br>* VTVM<br>* ATT<br>* Oscilloscope<br>* Test tape<br>(reference blank tape)<br>QZZCRA for Normal<br>QZZCRX for $CrO_2$<br>QZZCRY for FeCr | 1. Test equipment connection is shown in fig. 25.<br>  <br><br>  <br><br>**Fig. 25**<br>2. Place UNIT into record mode.<br>3. Supply 1 kHz signal (−24 dB) from AF oscillator, through ATT, to LINE IN.<br>4. Adjust ATT until monitor level at LINE OUT becomes 0.66 V.<br>5. Using test tape, make recording.<br>6. Playback recorded tape, and measure the output level at LINE OUT on VTVM.<br>**Standard value: 0.66±0.05 V**<br>7. If measured value is not within standard, adjust the following VR.<br>Normal·····VR9 (L-CH), VR10 (R-CH)<br>FeCr·····VR7 (L-CH), VR8 (R-CH)<br>$CrO_2$ ·····VR5 (L-CH), VR6 (R-CH) | * Record/playback mode<br>* Input level control ··· MAX.<br>* Standard input level:<br>MIC·····−72±3 dB<br>LINE IN ···−24±3 dB<br>DIN·····−34±3 dB<br>* Bias adjustment control<br>···center<br>* Output level control<br>···MAX. |
| **Fluorescent meter**<br>Equipment:<br>* VTVM<br>* AF oscillator<br>* ATT | 1. Test equipment connection is shown in fig. 25.<br>2. Set the meter function selector to the "bright" position.<br>3. Supply 1 kHz signal (−24 dB) to the LINE IN jack, then press the record button.<br>4. Adjust the ATT so that the output level at LINE OUT jack becomes 0.66 V. (=standard input level).<br>5. Adjustment at "0 dB".<br>  <br><br>A. Adjust VR303 (L-CH) and VR304 (R-CH) so that the Fluorescent meters show an illuminated indication up to "0 dB" when the input signal level is 0.9 dB higher than the standard input level.<br>B. Then confirm that the Fluorescent meters show an illuminated indication up to "+1 dB" when the input signal level is 1.0 dB higher than the standard input level. | * Record mode<br>* Input level control ··· MAX.<br>* Output level control<br>···MAX.<br>* Tepe selectors<br>···normal position |

| ITEM | MEASUREMENT & ADJUSTMENT | REMARKS |
|---|---|---|
| | 6. Adjustment at "−20dB"<br>  <br><br>A. Adjust VR301 (L-CH) and VR302 (R-CH) so that the Fluorescent meters show an illuminated indication up to "−20dB" when the input signal level is 15.1 dB lower than the standard input level.<br>B. Then confirm that the Fluorescent meters show an illuminated indication up to "−15dB" when the input signal level is 15.0dB lower than the standard input level.<br>7. Repeat twice between step 3 and 6 above. | |
| **Overall distortion**<br>Equipment:<br>* Distortion meter<br>* AF oscillator<br>* ATT<br>* Oscilloscope<br>* Test tape···QZZCRA (reference blank tape) | 1. Test equipment connection is shown in fig. 26.<br>2. Supply 1kHz signal to LINE IN and adjust ATT so that output level at LINE OUT indicates 0.66V (−4dB).<br>3. Make recording.<br>4. Play back, and measure distortion factor of output signal.<br>5. When the distortion factor does not satisfy the standard, check the bias current. When the dias current is lower than standard, distortion will increase.<br>Care should be exercised in the adjustment because the bias current also has an influence on the overall frequency response. Refer to "The overrall frequency response" and "The bias current adjustment".<br>  <br><br>**Fig. 26**<br>Standard value: Less then 4% | * Input level control ··· MAX.<br>* Output level control ··· MAX.<br>* Bias adjustment control ··· center |
| **Overall frequency response**<br>Equipment:<br>* VTVM<br>* AF oscillator<br>* ATT<br>* Test tape (reference blank tape)<br>···QZZCRA for Normal<br>···QZZCRX for $CrO_2$<br>···QZZCRY for FeCr | **Note:**<br>Before measuring and adjusting, make sure of the playback frequency response (For the method of measurement, please refer to the playback frequency response).<br>1. Test equipment connection is shown in fig. 25.<br>2. Load reference blank test tape and place UNIT into record mode.<br>3. Supply 1kHz signal from AF oscillator through ATT to LINE IN.<br>4. Adjust ATT so that input level is −20dB below standard recording level (standard recording level=0VU).<br>5. At this time, LINE OUT level indicates 0.066V.<br>6. Record each frequency 30Hz, 40Hz, 70Hz, 700Hz, 1kHz, 2kHz, 7kHz, 10kHz and 13.5kHz (16kHz for $CrO_2$ and FeCr) at the same level.<br>7. Play back and express in dB the difference between playback output level of each frequency based on playback output level of 1kHz.<br>8. Make sure that the measured value is within the range specified in the overall frequency response chart. | * Record/playback mode<br>* Input level control ··· MAX.<br>* Output level control ··· MAX.<br>* Bias adjustment control ··· center |

| ITEM | MEASUREMENT & ADJUSTMENT | REMARKS |
|---|---|---|
| | Overall frequency response chart<br>  <br><br>**Fig. 27**<br>Overall frequency response chart ($CrO_2$, FeCr)<br>  <br><br>**Fig. 28** | |
| Adjustment-1 | Adjustment 1-Using bias current<br>  <br><br>**Fig. 29**<br>1. When the frequency response between the middle-and high-frequency range becomes higher than the standard value, as shown by the solid line in fig. 25 increase the bias current by turning the following VR.<br>Normal·····VR13 (L-CH), VR14 (L-CH)<br>FeCr·····VR15<br>$CrO_2$·····VR16<br>2. When it becomes lower, as shown by dotted line, reduce the bias current by turning in the direction opposite to arrow indication.<br>**Note:**<br>1. For adjustment when the bias current is lower than the standard value use the procedure indicated in adjustment 2, because reducing the bias current beyond this point may worsen the distortion factor.<br>2. For the method of bias current measurement, refer to "Bias current adjustment" on page 8. | |

| ITEM | MEASUREMENT & ADJUSTMENT | REMARKS |
|---|---|---|
| Adjustment-2 | Adjustment 2-Using the peaking coil for recording equalization<br>  <br><br>**Fig. 30**<br>1. When the frequency response is flat in the middle-frequency range and makes a sharp rise or drop in the highfrequency range, as shown in fig. 30, adjust by turning the following peaking coils.<br>Normal·····L3 (L-CH), L4 (R-CH)<br>FeCr·····L5 (L-CH), L6 (R-CH)<br>$CrO_2$·····L7 (L-CH), L8 (R-CH) | |
| **Dolby NR circuit**<br>Equipment:<br>* VTVM<br>* AF oscillator<br>* ATT<br>* Oscilloscope | 1. Place UNIT into record mode, set the Dolby NR switch to OUT position and supply to LINE IN to obtain −34.5 dB at TP9 (L-CH), TP10 (R-CH) (frequency 5 kHz).<br>2. Confirm that the value at IN position is 8 dB greater than the value at OUT position of Dolby NR switch.<br>3. When it is not in condition above, adjust as follows.<br>4. Set VR201 to maximum.<br>5. Set the Dolby NR switch to IN position.<br>6. At this time adjust VR202 so that the reading of VTVM become 10 dB greater than the value in step (1) above.<br>7. Adjusting VR201 make the reading of VTVM become 2 dB smaller than the value obtainted through the adjustment in step (6) above. | * Record mode<br>* Input level control ··· MAX. |
| **Overall S/N ratio**<br>Equipment:<br>* VTVM<br>* AF oscillator<br>* ATT<br>* Oscilloscope<br>* Test tape···QZZCRA<br>(reference blank tape) | 1. Test equipments connection is shown in fig.25.<br>2. Supply 1 kHz signal to LINE IN and adjust ATT so that output level at LINE OUT indicates 0.66 V.<br>3. Make recording.<br>4. Make another recording without supplying signal (disconnect input plug to LINE IN).<br>5. Rewind to recorded part and playback.<br>6. Measure output signal level and no signal level (noise), and determine the ratio in decibels (dB).<br>7. The value is difference between "playback S/N and overall S/N", but for decibel calculation refer to "Playback S/N measurement" on page 9.<br>**Standard value: Greater than 45 dB (without NAB filter)** | * Record/playback mode<br>* Input level control ··· MAX.<br>* Erase the tape with a bulk tape eraser.<br>* Output level control ··· MAX.<br>* Bias adjustment control ··· center |

# ADJUSTMENT PARTS LOCATION



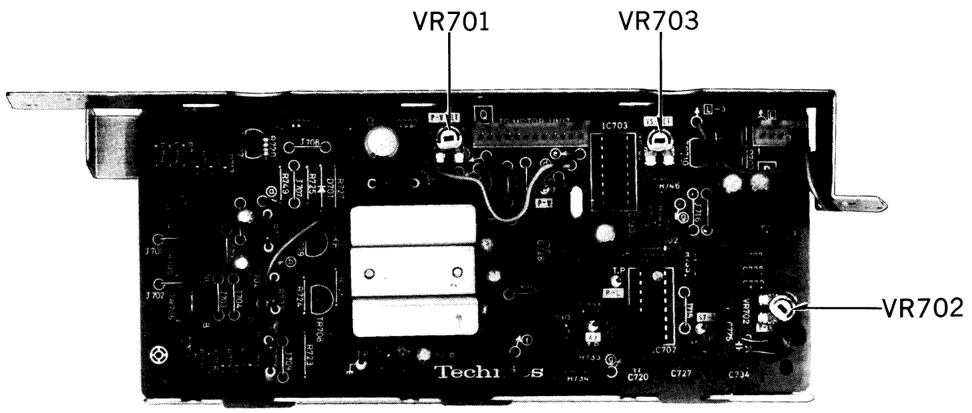
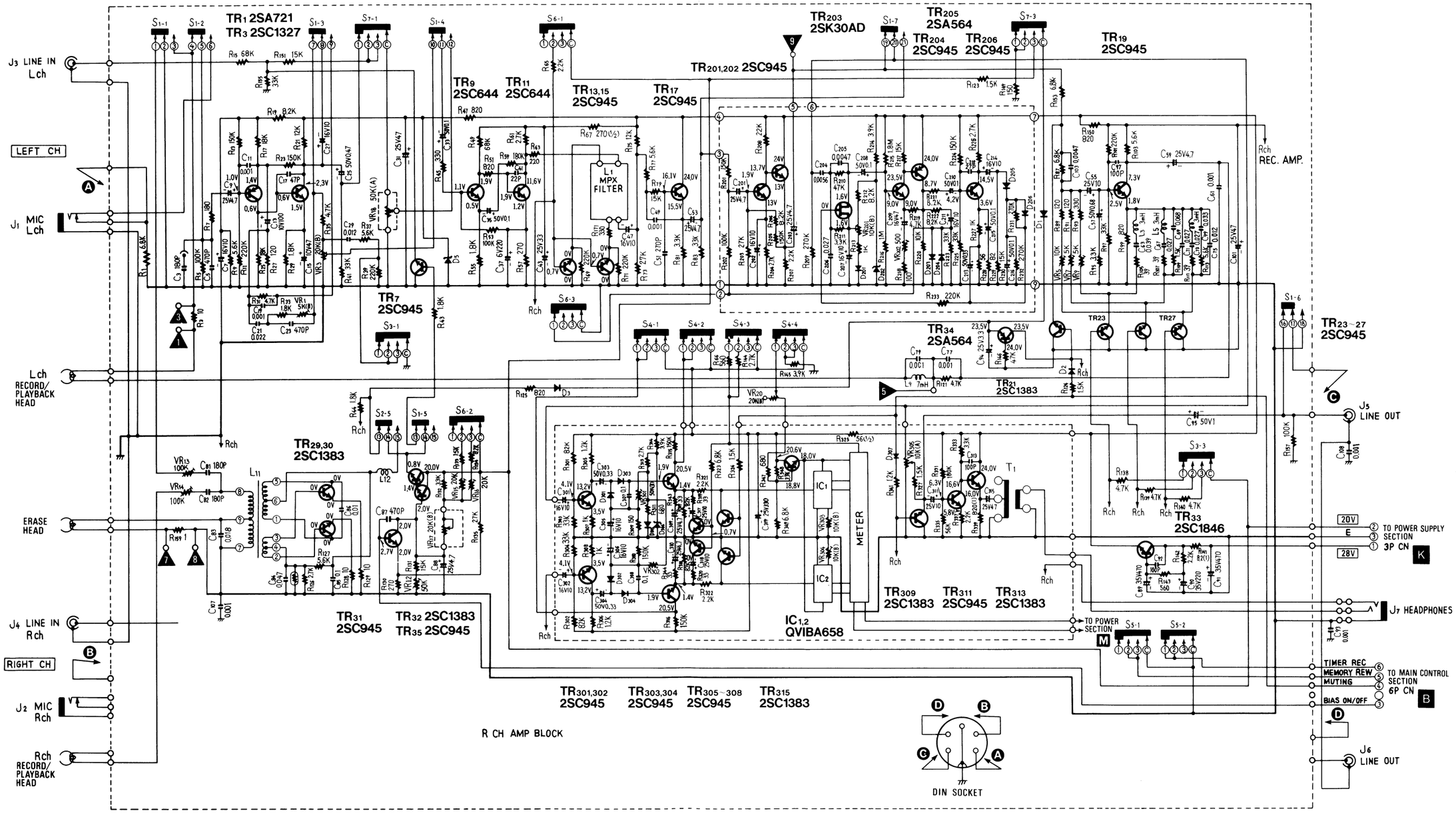




**Fig. 31**

# SCHEMATIC DIAGRAM MODEL RS-M85

## Main Amp Section

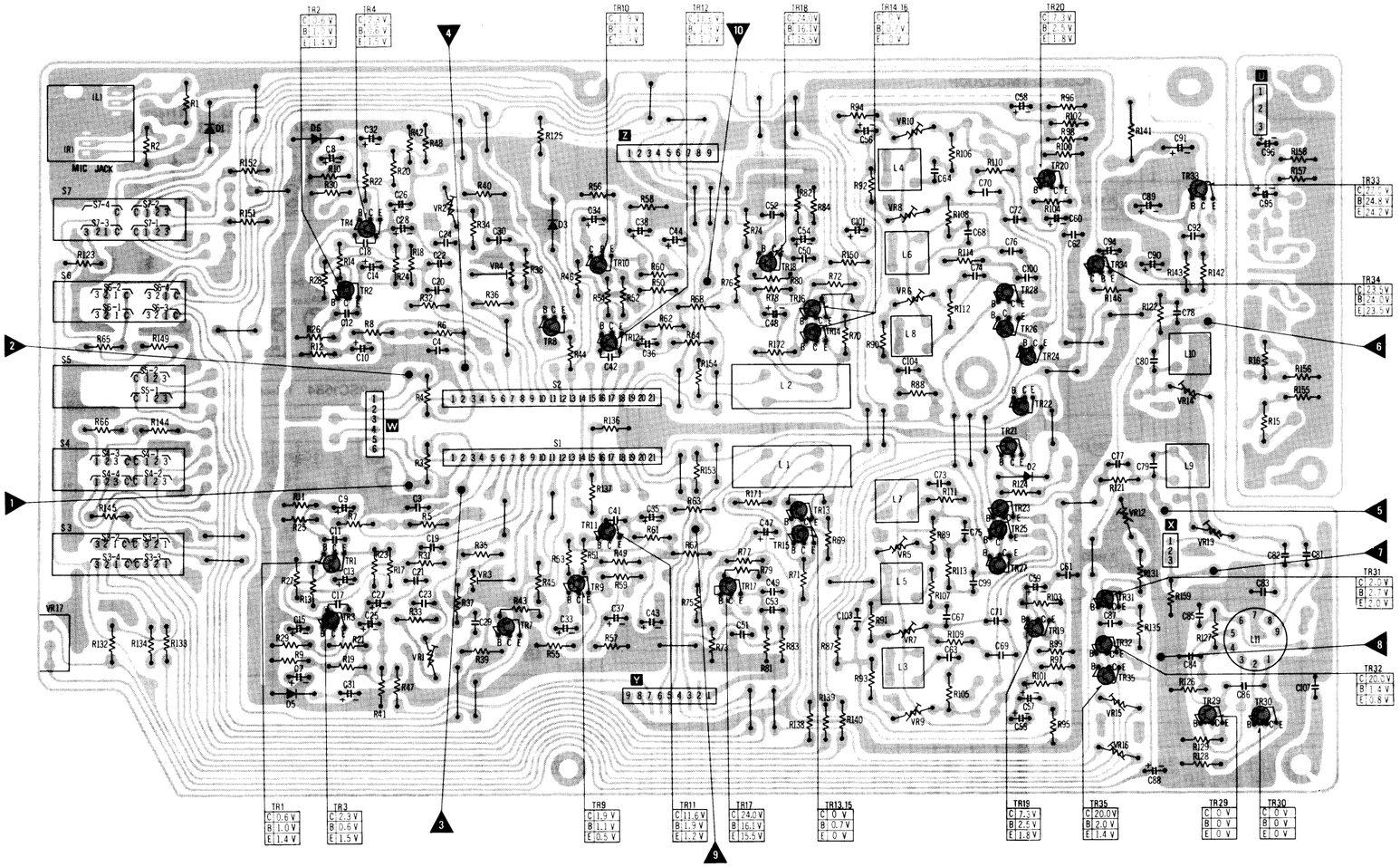



**NOTE:**

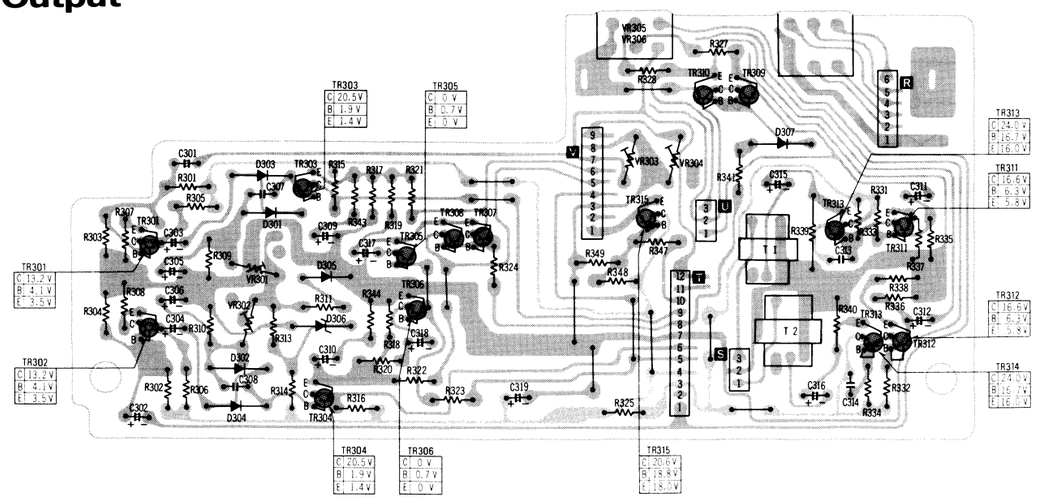
1. S1-1~S1-7, S2-1~S2-7 ..... Record/playback select switch (shown in playback position).
2. S3-1~S3-4 ..... Tape select switch (shown in "normal" position).
3. S4-1~S4-4 ..... Meter select switch (shown in "peak/bright" position).
4. S5-1, S5-2 ..... Function switch (shown in "memory rew" position).
5. S6-1~S6-4 ..... Dolby NR select switch (shown in "out" position).
6. S7-1~S7-4 ..... Input select switch (shown in "mic" position).
7. VR1, 2 ..... Playback equalizer adjustment VR.
8. VR3, 4 ..... Playback level adjustment VR.
9. VR5, 6 ..... Standard recording level adjustment VR (for $CrO_2$ tape).
10. VR7, 8 ..... Standard recording level adjustment VR (for FeCr tape).
11. VR9, 10 ..... Standard recording level adjustment VR (for normal tape).
12. VR12 ..... Erase current adjustment VR.
13. VR13, 14 ..... Bias current adjustment VR (for normal tape).
14. VR15 ..... Bias current adjustment VR (for FeCr tape).
15. VR16 ..... Bias current adjustment VR (for $CrO_2$ tape).
16. VR17 ..... Bias current adjustment control.
17. VR18, 19 ..... Input level control.
18. VR20 ..... Meter brightness adjustment control.
19. VR201, 202 ..... Dolby NR adjustment VR.
20. VR301, 302 ..... Fluorescent level meter adjustment VR (for −20dB indication).
21. VR303, 304 ..... Fluorescent level meter adjustment VR (for 0dB indication).
22. VR305, 306 ..... Output level control.
23. Resistor values are in ohms (Ω), 1/4 watt unless specified otherwise.
    K = 1,000Ω.
24. Capacitor values are in microfarads (μF) unless specified otherwise.
    P = Pico-farads.
25. All voltage values shown in circuitry under no signal condition with volume control at minimum position.
    For measurement, use VTVM.

# CIRCUIT BOARD

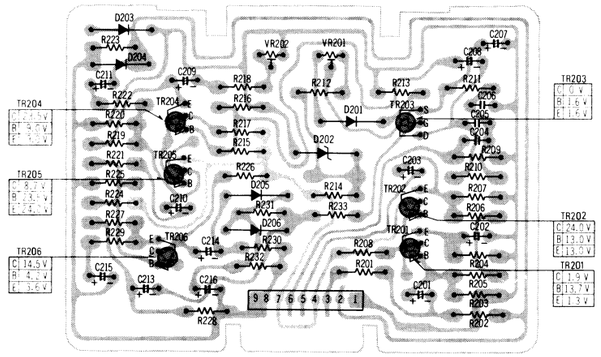
## Main Amp



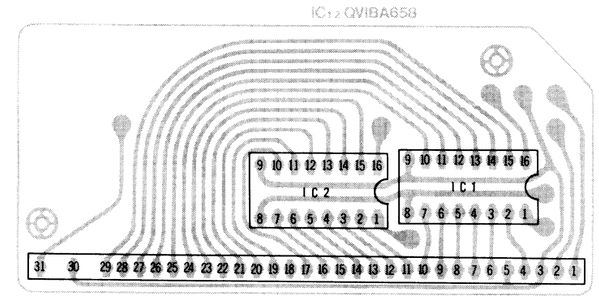

## Output



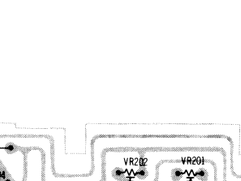

## Dolby




## FL Meter




## Headphones Jack



## Jack

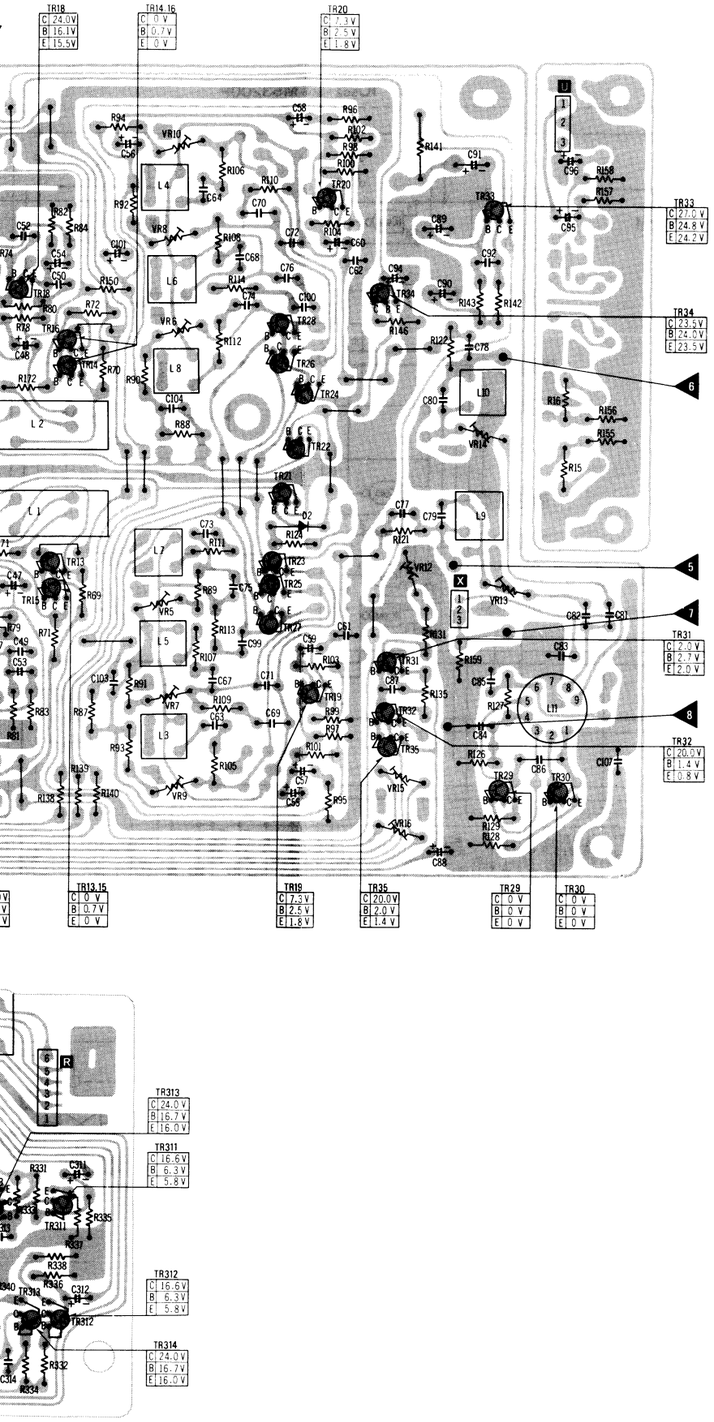


**NOTE:**

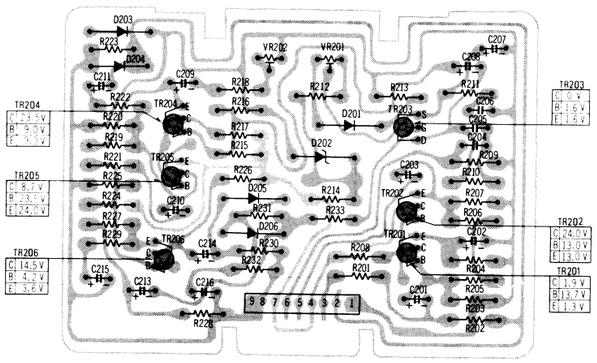
The circuit shown in red on the conductor is B circuit.
Values indicated in are DC voltage between the chassis and electrical parts.

**NOTE:** RESIS
ERD
ERG
ERD
ERX
ERD
ERD
ERF

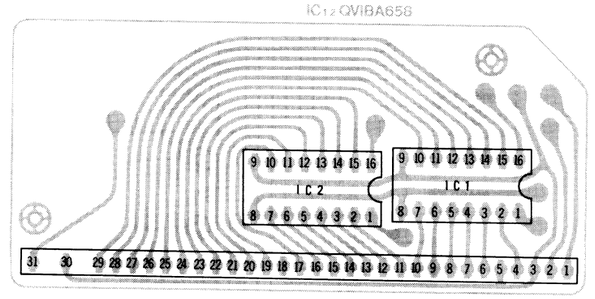
| Ref. No. | Part No. | Ref. No. |
|---|---|---|
| | **RESISTORS** | |
| R1, 2 | ERD25TJ682 | |
| R3, 4 | ERD25TJ100 | |
| R5, 6 | ERD25TJ104 | |
| R7, 8 | ERD25TJ181 | |
| R9, 10 | ERD25TJ562 | |
| R11, 12 | ERD25TJ224 | |
| R13, 14 | ERD25TJ154 | |
| R15, 16 | ERD25TJ683 | |
| R17, 18 | ERD25TJ183 | |
| R19, 20 | ERD25TJ822 | |
| R21, 22 | ERD25TJ123 | |
| R23, 24 | ERD25TJ154 | |
| R25, 26 | ERD25TJ183 | |
| R27, 28 | ERD25TJ121 | |
| R29, 30 | ERD25TJ182 | |
| R31, 32 | ERD25TJ472 | |
| R33, 34 | ERD25TJ182 | |
| R35, 36 | ERD25TJ472 | |
| R37, 38 | ERD25TJ562 | |
| R39, 40 | ERD25TJ224 | |
| R41, 42 | ERD25TJ333 | |
| R43, 44 | ERD25TJ182 | |
| R45, 46 | ERD25TJ331 | |
| R47, 48 | ERD25TJ821 | |
| R49, 50 | ERD25TJ683 | |
| R51, 52 | ERD25TJ821 | |
| R53, 54 | ERD25TJ104 | |
| R55, 56 | ERD25TJ182 | |
| R57, 58 | ERD25TJ271 | |
| R59, 60 | ERD25TJ184 | |
| R61, 62 | ERD25TJ272 | |
| R63, 64 | ERD25TJ221 | |
| R65 | ERD25TJ222 | |
| R66 | ERD25TJ561 | |
| R67, 68 ●□ | ERG12ANJ271 | |
| R67, 68 ○△ | ERD25TJ271 | |
| R69, 70, 71, 72 | ERD25TJ224 | |
| R73, 74 | ERD25TJ273 | |
| R75, 76 | ERD25TJ123 | |
| R77, 78 | ERD25TJ562 | |
| R79, 80 | ERD25TJ153 | |
| R81, 82 | ERD25TJ332 | |
| R83, 84 | ERD25TJ333 | |
| R87, 88 | ERD25TJ682 | |
| R89, 90, 91, 92 | ERD25TJ121 | |
| R93, 94 | ERD25TJ331 | |
| R95, 96 | ERD25TJ332 | |
| R97, 98 | ERD25TJ333 | |
| R99, 100 | ERD25TJ821 | |
| R101, 102 | ERD25TJ224 | |
| R103, 104 | ERD25TJ562 | |
| R105, 106, 107, 108 | ERD25TJ390 | |
| | | R109, 110 |
| | | R111, 112 |
| | | R113, 114 |
| | | R121, 122 |
| | | R123, 124 |
| | | R125 |
| | | R126 |
| | | R127 |
| | | R128, ● 129 □ |
| | | R128, ○ 129 △ |
| | | R130 |
| | | R131 |
| | | R132 |
| | | R133 |
| | | R134 |
| | | R135 |
| | | R138, 139 |
| | | R141 |
| | | R142 |
| | | R143 |
| | | R144 |
| | | R145 |
| | | R146 |
| | | R149 |
| | | R150 |
| | | R151, 152 |
| | | R153, 154 |
| | | R155, 156 |
| | | R157, 158 |
| | | R159 |
| | | R171, 172 |
| | | R175 ● □ |
| | | R201×2 |
| | | R202×2 |
| | | R203×2 |
| | | R204×2 |
| | | R205×2 |
| | | R206×2 |
| | | R207×2 |
| | | R208×2 |
| | | R209×2 |
| | | R210×2 |
| | | R211×2 |
| | | R212×2 |
| | | R213×2 |
| | | R214×2 |
| | | R215×2 |
| | | R216×2 |
| | | R217×2 |
| | | R218×2 |
| | | R219×2 |
| | | R220×2 |
| | | R221×2, 222×2 |
| | | R223×2 |



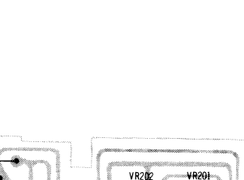

## Dolby




## FL Meter




## Headphones Jack




## Jack



**NOTE:**

The circuit shown in red on the conductor is B circuit.
Values indicated in ..... are DC voltage between the chassis and electrical parts.

**NOTE:** RESISTORS
ERD ··· Carbon
ERG ··· Metal-oxide
ERQ ··· Metal-film
ERX ··· Metal-film
ERQ ··· Fuse type metallic
ERC ··· Solid
ERF ··· Cement

CAPACITORS
ECG□ ····· Ceramic
ECK□ ····· Ceramic
ECC□ ····· Ceramic
ECF□ ····· Ceramic
ECQM ····· Polyster
ECQE ····· Polyster
ECQF ····· Polypropylene
ECE□ ····· Electrolytic
ECE□N ··· Non polar electrolytic
ECQS ····· Polystyrene
ECS□ ····· Tantalum

**NOTE:** 1. Symbols after Ref. No. indicate;
● ····· for United Kingdom
□ ····· for other European areas
○ ····· for Australia
△ ····· for other areas without European
Ref. No. without symbols apply to all areas.

2. ■ indicated that only parts specified by the manufacturer be used for safety.

| Ref. No. | Part No. | Ref. No. | Part No. | Ref. No. | Part No. | Ref. No. | Part No. | Ref. No. | Part No. | Ref. No. | Part No. | Ref. No. | Part No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **RESISTORS** | R109, 110 | ERD25TJ152 | R224×2 | ERD25TJ154 | R419 | ERD25TJ152 | R546 | ERD25TJ473 | | | R748 | ERD25TJ152 |
| R1, 2 | ERD25TJ682 | R111, 112 | ERD25TJ390 | R225×2 | ERD25TJ333 | R420 ●□ | ERG1ANJ391 | R547 | ERD25TJ562 | R627 | ERD25TJ562 | | **VARIABLE RESISTORS** |
| R3, 4 | ERD25TJ100 | R113, 114 | ERD25TJ562 | R226×2 | ERD25TJ272 | R420 ○△ | ERD25TJ391 | R548 | ERD25TJ474 | R628 | ERD25TJ473 | | |
| R5, 6 | ERD25TJ104 | R121, 122 | ERD25TJ472 | R227×2 | ERD25TJ102 | R421 | ERD25TJ471 | R549 | ERD25TJ101 | R629 | ERD25TJ122 | VR1, 2 | EVNK4AA00B53 |
| R7, 8 | ERD25TJ181 | R123, 124 | ERD25TJ152 | | | R422, 423 | ERD25TJ121 | R550 | ERD25TJ182 | R630 | ERD25TJ562 | VR3, 4 | EVNK4AA00B24 |
| R9, 10 | ERD25TJ562 | R125 | ERD25TJ821 | R228×2 | ERD25TJ560 | R424 | ERD25TJ471 | | | R631 | ERD25TJ682 | VR5, 6 | EVNK4AA00B14 |
| R11, 12 | ERD25TJ224 | R126 | ERD25TJ272 | R229×2 | ERD25TJ820 | R425 | ERG12ANJ220 | R551 | ERD25TJ562 | R632 | ERD25TJ153 | VR7, 8, 9, 10 | EVNK4AA00B53 |
| R13, 14 | ERD25TJ154 | R127 | ERD25TJ562 | R230×2 | ERD25TJ153 | R426 | ERD25TJ121 | R552 | ERD25TJ153 | R634 | ERG1ANJ271 | VR12 | EVNK4AA00B54 |
| R15, 16 | ERD25TJ683 | R128, ● 129 □ | ERD25TJ100 | R231×2, 232×2 | ERD25TJ274 | R427 | ERX1ANJ120 | R553 | ERD25TJ681 | R635 | ERD25TJ562 | VR13, 14 | EVNK4AA00B15 |
| R17, 18 | ERD25TJ183 | R128, ○ 129 △ | ERD25TJ220 | R233×2 | ERD25TJ224 | R428 ●□ | ERG1ANJ390 | R554 | ERD25TJ182 | R636 | ERD25TJ682 | VR15, 16 | EVNK4AA00B24 |
| R19, 20 | ERD25TJ822 | R130 | ERD25TJ271 | R301, 302 | ERD25TJB23 | | | R556, 558 | ERD25TJ681 | R638 | ERD25TJ272 | VR17 | EVH1RA084B24 |
| | | R131 | ERD25TJ153 | R303, 304 | ERD25TJ333 | R428 ○△ | ERG1ANJ120 | R559 | ERD25TJ153 | | | VR18 | EWKNXAF22A54 |
| R21, 22 | ERD25TJ123 | R132 | ERD25TJ333 | R305, 306 | ERD25TJ122 | R429 ●□ | ERQ12HJ180 | R560, 561 | ERD25TJ562 | R639 | ERD25TJ103 | VR20 | EVHG3AS15B24 |
| R23, 24 | ERD25TJ154 | R133 | ERD25TJ153 | R307, 308 | ERD25TJ102 | R429 ○△ | ERD25TJ270 | R562 | ERD25TJ473 | R640 | ERG12ANJ181 | | |
| R25, 26 | ERD25TJ183 | R134 | ERD25TJB22 | R309, 310 | ERD25TJ154 | R430 | ERG12ANJ220 | R563 | ERD25TJ182 | R641 | ERD25TJ272 | VR201 ×2 | EVNK0AA00B14 |
| R27, 28 | ERD25TJ121 | R135 | ERD25TJ272 | R311 | ERD25TJ681 | R501 | ERD25TJ562 | R564 | ERD25TJ153 | R642 | ERD25TJ103 | VR202 ×2 | EVNK0AA00B52 |
| R29, 30 | ERD25TJ182 | R138, 139, 140 | | R313 | ERD25TJ272 | R502 | ERD25TJ101 | | | R644 | ERD25TJ272 | VR301, 302 | EVNK4AA00B54 |
| R31, 32 | ERD25TJ472 | | ERD25TJ472 | R314 | ERD25TJ392 | R503 | ERD25TJ562 | R565 | ERD25TJ331 | R645 | ERD25TJ153 | VR303, 304 | EVNK4AA00B14 |
| R33, 34 | ERD25TJ182 | R141 | ERX1ANJ8R2 | R315, 316 | ERD25TJ154 | R504 | ERD25TJ101 | R566 | ERD25TJ182 | R646 | ERD25TJ102 | VR305 | EWKEUA033A14 |
| R35, 36 | ERD25TJ472 | | | R317, 318 | ERD25TJB23 | R505 | ERD25TJ562 | R567, 568 | ERD25TJ473 | R647 | ERD25TJ2R2 | VR401, 701, 702 | |
| R37, 38 | ERD25TJ562 | R142 | ERD25TJ222 | R319, 320 | ERD25TJ330 | R506 | ERD25TJ101 | R569 | ERD25TJ562 | R701 | ERD25TJ560 | | EVNK4AA00B53 |
| R39, 40 | ERD25TJ224 | R143 | ERD25TJ561 | R321, 322 | ERD25TJ222 | R507 | ERD25TJ562 | R570 | ERD25TJ681 | R702 | ERD25TJ103 | VR703 | EVNK4AA00B52 |
| | | R144 | ERD25TJ272 | R323 | ERD25TJ682 | R508 | ERD25TJ101 | R571, 572 | ERD25TJ392 | R703 | ERD25TJ560 | | **CAPACITORS** |
| R41, 42 | ERD25TJ333 | R145 | ERD25TJ392 | R324 | ERD25TJ152 | R509 | ERD25TJ562 | R573 | ERD25TJ152 | R704 | ERD25TJ103 | C3, 4 | ECCD1H181K |
| R43, 44 | ERD25TJ182 | R146 | ERD25TJ472 | R325 ●□ | ERQ12HJ560 | R510 | ERD25TJ101 | R574 | ERD25TJ182 | R705 | ERD25TJ560 | C5, 6 | ECKD1H471K |
| R45, 46 | ERD25TJ331 | R149 | ERD25TJ151 | | | R511 | ERD25TJ562 | R575 | ERD25TJ562 | R706, 707, 708, 709 | | C7, 8 | ECEA1HS100 |
| R47, 48 | ERD25TJ821 | R150 | ERD25TJ821 | R325 ○△ | ERD25TJ560 | R512 | ERD25TJ101 | R576 | ERD25TJ182 | | ERD25TJ103 | C9, 10 | ECEA25M4R7 |
| R49, 50 | ERD25TJ683 | R151, 152 | ERD25TJ153 | R327, 328 | ERD25TJ152 | R513 | ERD25TJ222 | R577 | ERG1ANJ820 | R710, 711, 712, 713, 714, 715 | ERD25TJ102 | C11, 12 | ECQM05102KZ |
| R51, 52 | ERD25TJ821 | R153, 154 | ERD25TJ682 | R331, 332 | ERD25TJ184 | R514 | ERD25TJ471 | R590 | ERD25TJ151 | | | C13, 14 | ECEA1AS101 |
| R53, 54 | ERD25TJ104 | R155, 156 | ERD25TJ333 | R333, 334 | ERD25TJ332 | R515 | ERD25TJ222 | R592, 593 | ERD25TJ331 | R716 | ERD25TJ272 | C15, 16 | ECEA1AS470 |
| R55, 56 | ERD25TJ182 | | | R335, 336 | ERD25TJ563 | R516 | ERD25TJ681 | R595 | ERD25TJ473 | R717, 718 | ERD25TJ103 | C17, 18 | ECCD1H470K |
| R57, 58 | ERD25TJ271 | R157, 158 | ERD25TJ104 | R337, 338 | ERD25TJ222 | | | R596 | ERD25TJ102 | R719 ●□ | ERG12ANJ100 | C19, 20 | ECQM05102KZ |
| R59, 60 | ERD25TJ184 | R159 | ERD25TJ1R0 | R339, 340 | ERG1ANJ821 | R517 | ERD25TJ102 | R601 | ERD25TJ153 | R719 ○△ | ERG12ANJ100 | C21, 22 | ECQM05223KZ |
| | | R171, 172 | ERD25TJ331 | R341 | ERD25TJ122 | R518 | ERD25TJ562 | R602 | ERD25TJ561 | R720 | ERD25TJ182 | | |
| R61, 62 | ERD25TJ272 | R175 ●□ | ERG1ANJ560 | R343, 344 | ERD25TJ330 | R519, 520 | ERD25TJ153 | R603 | ERD25TJ153 | | | C23, 24 | ECKD1H471K |
| R63, 64 | ERD25TJ221 | R201×2 | ERD25TJ154 | R347 ●□ | ERD25TJ681 | R521 | ERD25TJ271 | R604 | ERD25TJ122 | R721 | ERX12ANJ5R6 | C25, 26 | ECEA50MR47 |
| R65 | ERD25TJ222 | R202×2 | ERD25TJ104 | | | R522 | ERD25TJ562 | R605 | ERD25TJ221 | R722 | ERD25TJ182 | C27, 28 | ECEA1HS100 |
| R66 | ERD25TJ561 | R203×2 | ERD25TJ273 | R347 ○△ | ERD25TJ101 | R523 | ERD25TJ473 | | | R728 | ERD25TJ183 | C29, 30 | ECQM05123K |
| R67, 68 ●□ | ERG12ANJ271 | R204×2 | ERD25TJ272 | R348 | ERD25TJ332 | R524 | ERD25TJ562 | R606 | ERD25TJ2R2 | R729 | ERD25TJ121 | C31, 32 | ECEA1ES470 |
| R67, 68 ○△ | ERD25TJ271 | R205×2 | ERD25TJ154 | R349 | ERD25TJ682 | R525 | ERD25TJ104 | R607 | ERD25TJ221 | R730 | ERD25TJ823 | C33, 34 | ECEA50MR1 |
| R69, 70, 71, 72 | ERD25TJ224 | R206×2 | ERD25TJB22 | R401 | ERX1ANJ2R2 | R526 | ERD25TJ562 | R608 | ERD25TJ102 | R731 | ERD25TJ473 | C35, 36 | ECEA50ZR1 |
| R73, 74 | ERD25TJ273 | | | R402 | ERG1ANJ471 | R527 | ERD25TJ153 | R609 | ERD25TJ153 | R732 | ERD25TJ272 | C37, 38 | ECEA1AS221 |
| R75, 76 | ERD25TJ123 | R207×2 | ERD25TJ222 | R403 | ERD25TJ472 | | | R610 | ERD25TJ2R2 | R733 | ERD25TJ103 | C41, 42 | ECCD1H220K |
| R77, 78 | ERD25TJ562 | R208×2 | ERD25TJ223 | R404 | ERD25TJ121 | R528 | ERD25TJ563 | R611 | ERD25TJ221 | R734 | ERD25TJ472 | C43, 44 | ECEA1VS330 |
| | | R209×2 | ERD25TJ274 | R405 | ERD25TJ272 | R529 | ERD25TJ562 | R612 | ERD25TJ561 | R735 | ERD25TJ104 | | |
| R79, 80 | ERD25TJ153 | R210×2 | ERD25TJ473 | R406 | ERD25TJ103 | R530 | ERD25TJ472 | R613 | ERD25TJ122 | | | C47, 48 | ECEA1HS100 |
| R81, 82 | ERD25TJ332 | R211×2 | ERD25TJ332 | R407 | ERD25TJ472 | R531 | ERD25TJ122 | R614 | ERD25TJ153 | R736 | ERD25CKF8202 | C49, 50 | ECQM05102KZ |
| R83, 84 | ERD25TJ333 | R212×2 | ERD25TJB22 | | | R532 | ERD25TJ102 | R615 | ERD25TJ561 | R737 | ERD25TJ153 | C51, 52 | ECCD1H271K |
| R87, 88 | ERD25TJ682 | R213×2 | ERD25TJ102 | R408 | ERD25TJ272 | R533 | ERD25TJ474 | | | R738 | ERD25TJB22 | C53, 54 | ECEA1JS4R7 |
| R89, 90, 91, 92 | ERD25TJ121 | R214×2 | ERD25TJ392 | R409 | ERD25TJ273 | R534 | ERD25TJ101 | R617 | ERD25TJ682 | R739 | ERD25TJ392 | C55, 56 | ECEA1HS100 |
| R93, 94 | ERD25TJ331 | R215×2 | ERD25TJ185 | R410 411 | ERD25TJ102 | R535 | ERD25TJ334 | R618 | ERD25TJ153 | R740 | ERD25TJ102 | C57, 58 | ECEA50ZR68 |
| R95, 96 | ERD25TJ332 | R216×2 | ERD25TJ105 | R412 | ERD25TJ153 | R536, 537 | ERD25TJ101 | R619 | ERG1ANJ271 | R741 | ERD25TJB21 | C59, 60 | ECEA25M4R7 |
| R97, 98 | ERD25TJ333 | | | R413 | ERD25TJ471 | R538 | ERD25TJ471 | R620 | ERD25TJ562 | R742 | ERD25TJ225 | C61, 62 | ECKD1H102K |
| R99, 100 | ERD25TJB21 | R217×2 | ERD25TJ153 | R414 | ERD25TJ473 | | | R621 | ERD25TJ331 | R743 | ERD25TJ121 | C63, 64 | ECQM05393KZ |
| R101, 102 | ERD25TJ224 | R218×2 | ERD25TJ101 | R415 | ERX1ANJ1R0 | R539 | ERD25TJ101 | R622 | ERD25TJ682 | R744 | ERD25TJ273 | C67, 68 | ECQM05273KZ |
| | | R219×2 | ERD25TJ472 | R416 | ERG1ANJ681 | R540 | ERD25TJ562 | R623 | ERD25TJ153 | R745 | ERD25TJB21 | | |
| R103, 104 | ERD25TJ562 | R220×2 | ERD25TJ103 | R417 | ERD25TJ391 | R541 | ERD25TJ153 | R624 | ERG1ANJ271 | | | C69, 70 | ECQM05683KZ |
| R105, 106, 107, 108 | ERD25TJ390 | R221×2, 222×2 | ERD25TJB22 | R418 | ERD25TJ221 | R542, 543 | ERD25TJ473 | R625 | ERD25TJ562 | R746 | ERD25TJ152 | C71, 72, 73, 74 | ECQM05273KZ |
| | | R223×2 | ERD25TJ333 | | | R544, 545 | ERD25TJ562 | R626 | ERD25TJ331 | R747 ○△ | ERG12ANJ181 | C75, 76 | ECQM05123KZ |

| Ref. No. | Part No. |
|---|---|
| C77, 78 | ECQM05102KZ |
| C79, 80 | ECQF4103KZH |
| C81, 82 | ECQS1181JZ |
| C83 | ECQF4183KZH |
| C84 | ECQM05473KZ |
| C85 | ECQM05104KZ |
| C86 | ECQF4103KZH |
| C87 | ECKD1H471K |
| C88 | ECEA1JS4R7 |
| C89 | ECEA1VS471 |
| C90 | ECEA1VS221 |
| C91 | ECEA1VS471 |
| C92 | ECCD1H101K |
| C93 | ECKD1H102KB |
| C94 | ECEA25Z3R3 |
| C95, 96 | ECEA2AS010 |
| C97, 98 | ECCD1H101K |
| C99, 100 | ECQM05333KZ |
| C101 | ECEA1ES470 |
| C103, 104 | ECQM05472KZ |
| C107, 108 | ECKD1H102K |
| C201×2 | ECEA1JS4R7 |
| C202×2 | ECEA1HS100 |
| C203×2 | ECEA1JS4R7 |
| C204×2 | ECQM05562KZ |
| C205×2 | ECQM05472KZ |
| C206×2 | ECQM05273KZ |
| C207×2 | ECEA1HS100 |
| C208×2 | ECEA50MR1 |
| C209×2 | ECEA1ES470 |
| C210×2 | ECEA50ZR1 |
| C211×2 | ECEA1HS100 |
| C212×2 | ECCD1H270KC |
| C213×2 | ECEA50ZR33 |
| C214×2 | ECEA1HS100 |
| C215×2 | ECEA50ZR1 |
| C216×2 | ECEA50ZR1 |
| C301, 302 | ECEA1HS100 |
| C303, 304 | ECEA50ZR33 |
| C305, 306 | ECEA1HS100 |
| C307, 308 | ECQM05104KZ |
| C309, 310 | ECEA25Z4R7 |
| C311, 312 | ECEA1HS100 |
| C313, 314 | ECCD1H101K |
| C315, 316 | ECEA1ES470 |
| C317, 318 | ECEA1HS100 |
| C319 | ECEA1ES331 |
| C401 ■ | ECET35R2200S |
| C402 | ECEA1VS101 |
| C404 | ECEA1ES221 |
| C405 ■ | ECET16R2200S |
| C406 | ECEA1HS100 |
| C407 | ECKD1H102KB |
| C408 ■ | ECET25R4700S |
| C409, 410 ■ | ECEA1AS472 |
| C411 | ECQM05473KZ |
| C501, 502, 503, 504, 505, 506 | ECKD1H103ZF |
| C507 | ECEA1AS470 |
| C508 | ECEA16Z10 |
| C509 | ECEA1HS100 |
| C510 | ECEA16Z10 |
| C511 | ECEA50Z1 |
| C512 | ECEA16Z10 |
| C513 | ECEA2AS2R2 |
| C514 | ECEA16N10 |
| C515 | ECEA1HS100 |
| C517, 518 | ECKD1H472KB |
| C519 | ECEA1AS221 |
| C521 | ECKD1H103ZF |
| C522 | ECEA16Z10 |
| C523 | ECEA2AS010 |
| C524, 525 | ECEA1HS100 |
| C526 | ECEA1CS471 |
| C530 | ECEA2AS3R3 |
| C590 | ECEA1JS4R7 |
| C601, 602 | ECEA1CS330 |
| C603, 604, 605 | ECEA16Z10 |
| C610 | ECEA50Z2R2 |
| C701, 702, 703 | ECEA25Z3R3 |
| C704 | ECEA50ZR47 |
| C705, 706, 707 | ECEA50ZR22 |
| C708 | ECQM05103KZ |
| C709 | ECQM05473KZ |
| C710 | ECQM05393KZ |
| C712 | ECQM05104KZ |
| C713 | ECEA25Z100 |
| C714 | ECQM05393KZ |
| C715 | ECQM05683KZ |
| C716 | ECQM05104KZ |
| C717 | ECQM05103KZ |
| C718 | ECQM05223KZ |
| C719 | ECEA50ZR22 |
| C720 | ECQM05562KZ |
| C721 | ECQM05153KZ |
| C722 | ECQM05562KZ |
| C723 | ECKD1H471KB |
| C724 | ECQM05123KZ |
| C725 | ECQM05182KZ |
| C726 | ECQS1682JZ |
| C727 | ECQM05223KZ |
| C728, 729 | ECCD1H220KC |
| C730 | ECQM05562KZ |
| C731, 732, 733 | ECEA1CS330 |
| C734 | ECQM05332KZ |

### COMBINATION PARTS

| | | |
|---|---|---|
| Z401, 402 | ■ | QCR0011 |
| Z401 | △ ■ | QCR0008 |

### TRANSISTORS

| | |
|---|---|
| Tr1, 2 | 2SA721 |
| Tr3, 4 | 2SC1327 |
| Tr7, 8 | 2SC945 |
| Tr9, 10, 11, 12 | 2SC644 |
| Tr13, 14, 15, 16, 17, 18, 19, 20 | 2SC945 |
| Tr21, 22 | 2SC1383 |
| Tr23, 24, 25, 26, 27, 28 | 2SC945 |
| Tr29, 30 | 2SC1383 |
| Tr31 | 2SC945 |
| Tr32 | 2SC1383 |
| Tr33 | 2SC1846 |
| Tr34 | 2SA564 |
| Tr35, 201×2, 202×2 | 2SC945 |
| Tr203×2 | 2SK30AD |
| Tr204×2 | 2SC945 |
| Tr205×2 | 2SA564 |
| Tr206×2, 301, 302, 303, 304, 305, 306, 307, 308 | 2SC945 |
| Tr309, 310 | 2SC1383 |
| Tr311, 312 | 2SC945 |
| Tr313, 314, 315 | 2SC1383 |
| Tr401 | 2SC1226 |
| Tr402, 403, 404, 405 | 2SC1684 |
| Tr406 | 2SA564 |
| Tr407 | 2SD389 |
| Tr408, 409 | 2SC1684 |
| Tr501, 502, 503 | 2SC1317 |
| Tr504 | 2SC1684 |
| Tr505 | 2SA564 |
| Tr506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 518, 519, 520, 521, 522 | 2SC1684 |
| Tr523 | 2SA564 |
| Tr601 | 2SA719 |
| Tr602 | 2SC1383 |
| Tr603 | 2SA719 |
| Tr604, 605 | 2SC1684 |
| Tr606 | 2SC1317 |
| Tr607 | 2SC1684 |
| Tr608 | 2SC1317 |
| Tr609, 610, 611 | 2SC1684 |
| Tr612 | 2SA886 |
| Tr613 | 2SC1684 |
| Tr614 | 2SA886 |
| Tr615 | 2SA564 |
| Tr616 | 2SC1684 |
| Tr617 | 2SA886 |
| Tr618 | 2SC1684 |
| Tr619 | 2SC1847 |
| Tr620 | 2SC1684 |
| Tr621 | 2SC1847 |
| Tr622 | 2SC1684 |
| Tr623 | 2SC1847 |
| Tr624 ● □ | 2SC1406 |
| Tr624 ○ △ | 2SC1883 |
| Tr701, 702, 703 | 2SC1846 |
| Tr704, 705, 706 | 2SA885 |
| Tr707 | 2SC1318 |
| Tr710 ● □ | 2SC1383 |
| Tr710 ○ △ | 2SC1318 |

### INTEGRATED CIRCUITS

| | |
|---|---|
| IC1, 2 | QVIBA658 |
| IC501 | AN6251 |
| IC502, 503, 504, 505 | M53200P |
| IC506 | DN835 |
| IC701 | AN640F |
| IC702 | AN660 |
| IC703 | M58432P |

### DIODES

| | |
|---|---|
| D1, 2, 3 | MA150 |
| D5, 6 | MA1190 |
| D201×2 | OA90M |
| D202×2 | MA1082 |
| D203×2, 204×2 | MA150 |
| D205×2 | OA90 |
| D206×2 | MA150 |
| D301, 302, 303, 304 | OA91 |
| D305 | MV121 |
| D306 | MA1068 |
| D307 | MA150 |
| D401 ■ | RVD10DC2 |
| D402 ■ | RVD10DC2R |
| D403 | MA1075 |
| D404 | MA1051 |
| D405 ■ | RVD10DC2 |
| D406 ■ | RVD10DC2R |
| D407 | MA150 |
| D408 | MA1056 |
| D409 ■ | RVD10DC2 |
| D410 ■ | RVD10DC2R |
| D411 ■ | RVD10DC2 |
| D412 ■ | RVD10DC2R |
| D413 | SM102 |
| D414 ■ | RVD10DC2R |
| D414 | MV121 |
| D415 ■ | RVD10DC2 |
| D501, 502, 503, 504, 505, 506, 507, 508 | MA150 |
| D509 | OA91 |
| D510, 511, 513, 514 | MA150 |
| D515 | SM102 |
| D516 | MV121 |
| D517 | MA150 |
| D550, 551, 552 | SM102 |
| D590, 601, 602, 603, 604, 605 | MA150 |
| D606, 608 | OA90M |
| D609 | SM102 |
| D610 | OA90M |
| D611 | SM102 |
| D702 | MA150 |
| D703 | MA1120 |

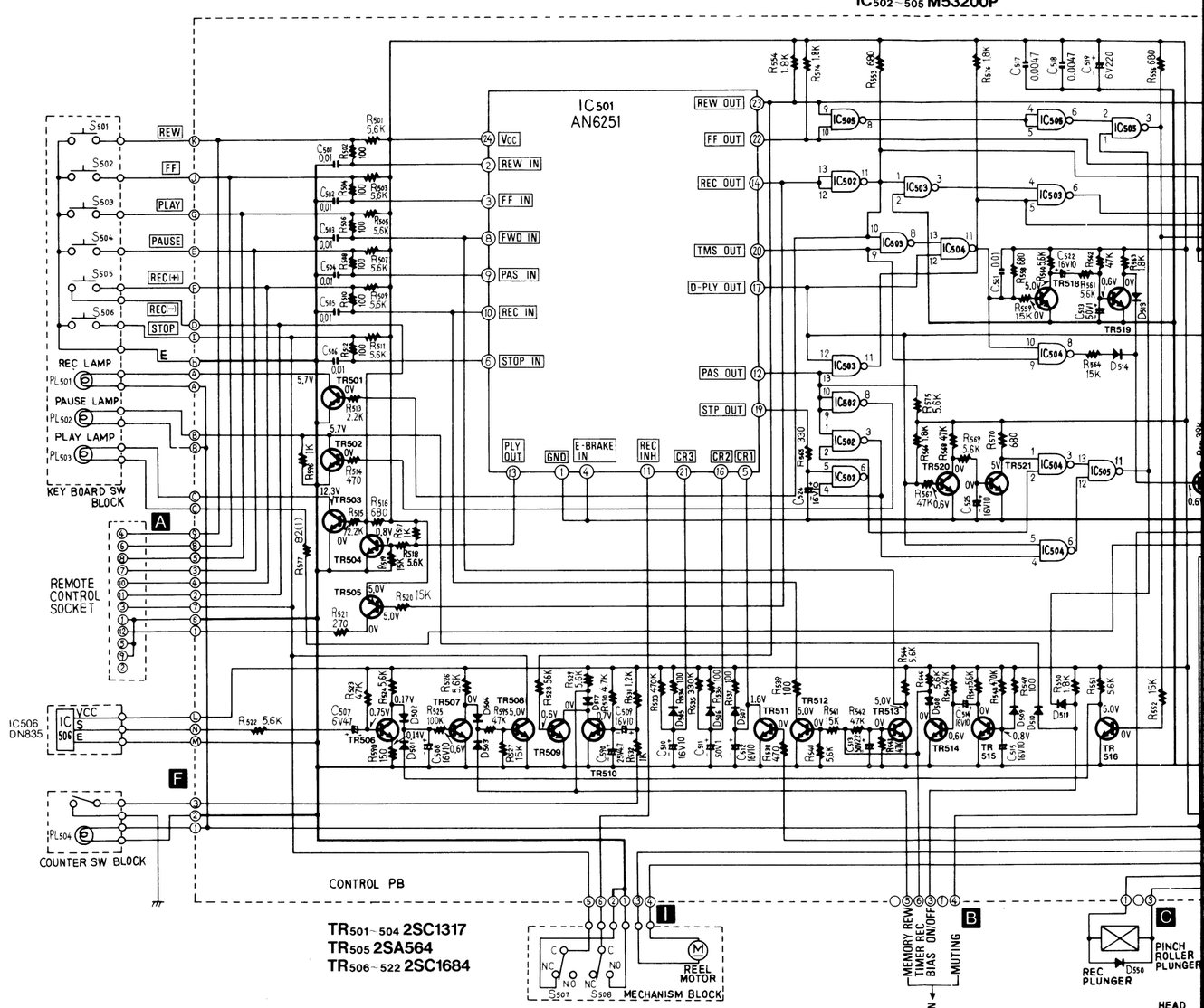
| Ref. No. | Part No. | Part Name & Description |
|---|---|---|
| | | **TRANSFORMERS** |
| T1, 2 | QLT2D26X | Headphone Transformer |
| T401 ● ○ △ ■ | QLPA40EMX | Power Transformer |
| T401 □ ■ | QLPD29EMX | 〃 |
| | | **COILS** |
| L1, 2 | QLM9Z4K | MPX Filter |
| L3, 4, 5, 6, 7, 8 | QLQX0331W | 3mH Coil |
| L9, 10 | QLQX0731W | 7mH Coil |
| L11 | QLB0184 | Bias Oscillator Coil |
| L12 ○ △ | QLQX2421Y | Choke Coil |
| L401, 601, 602 | QLQZ1014D | 〃 |
| | | **SWITCHES** |
| S1, 2 | QSS7203 | Slide Switch (Record/Playback Selector) |
| S3, 4, 5 6, 7 | QST4311 | Lever Switch |
| S401 ●□ ○ ■ | QSW2214 | Push Switch (Power ON/OFF) |
| S401 △ ■ | QSW1206A | 〃 |
| S402 ■ | QSR1407 | Voltage Select Switch |
| S501, 502, 503, 504, 505, 506 | QSW1111H | Control Key Switch |
| S507, 508 | QSM0067 | Micro Switch |
| | | **PILOT LAMPS** |
| PL501, 502, 503 | XAMQ34S600W | Pilot Lamp |
| PL505 | XAMQ41S400 | 〃 |
| | | **FUSES** |
| F401 ● □ ■ | XBAQ0009 | Mini Fuse (800mAT) |
| F401 △ ■ | XBA1E10NR3 | 〃 |
| F402 ● □ ■ | XBAQ0004 | Mini Fuse (1AT) |
| F403, 404 ● □ ■ | XBAQ0010 | Mini Fuse (1.6AT) |
| F405 ● □ ■ | XBAQ0006 | Mini Fuse (315mAT) |

The following shows the difference between the parts of model RS-M85 and RS-M75.

| Ref. No. | Part No. | |
|---|---|---|
| | RS-M85 | RS-M75 |
| R729 | ERD25TJ121 | ---- |
| R731 | ERD25TJ473 | ---- |
| R732 | ERD25TJ272 | ---- |
| R742 | ERD25TJ225 | ---- |
| R743 | ERD25TJ121 | ---- |
| R744 | ERD25TJ273 | ---- |
| R745 | ERD25TJ821 | ---- |
| R746 | ERD25TJ152 | ---- |
| C728, 729 | ECCD1H220KC | ---- |
| C730 | ECQM05562KZ | ---- |
| C731 | ECEA16V33 | ---- |
| Tr505 | 2SA564 | ---- |
| IC703 | M58432P | ---- |
| D702 | MA150LF | ---- |

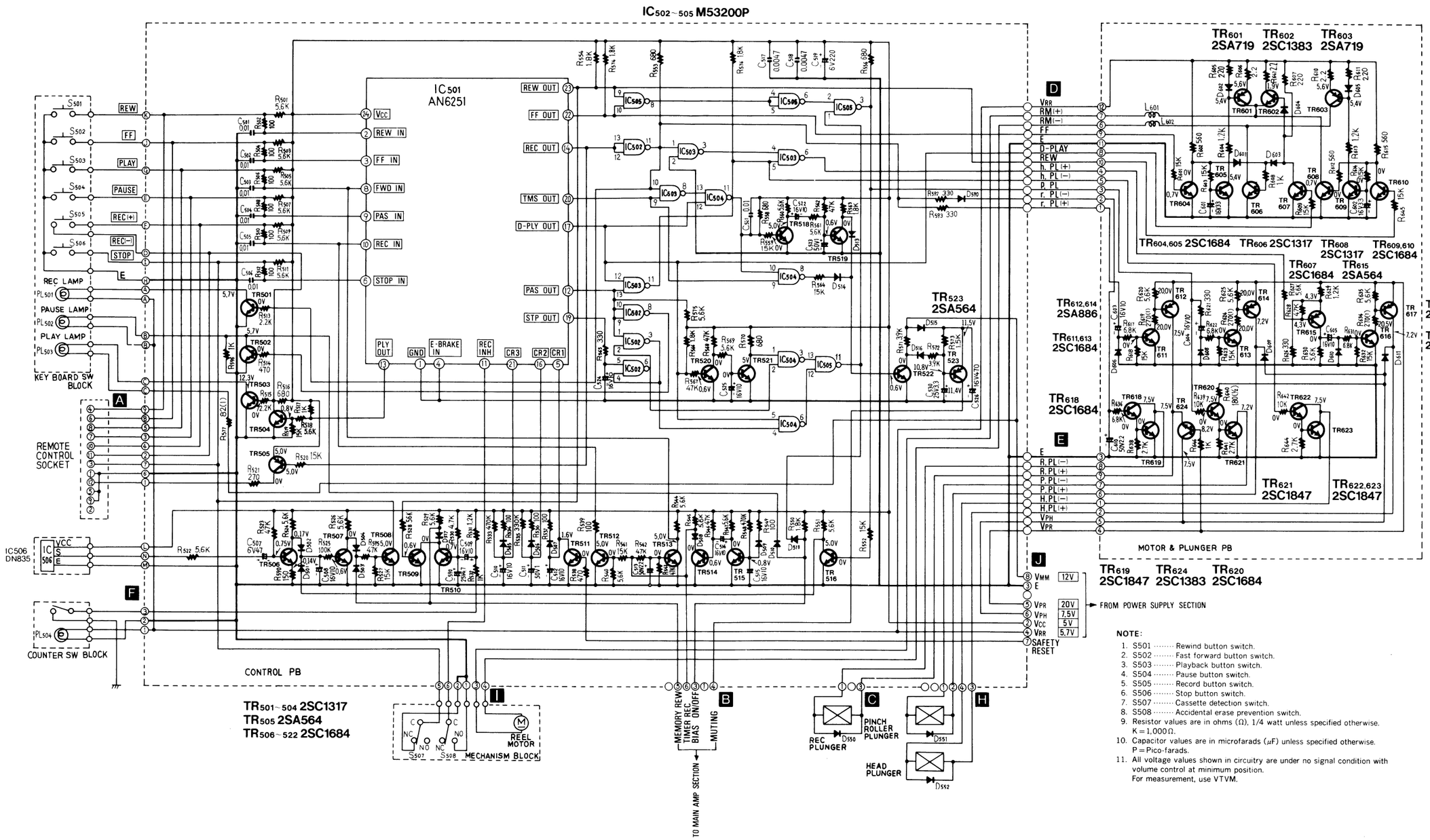
# SCHEMATIC DIAGRAM MODEL RS-M85

## Main Control Section



# SCHEMATIC DIAGRAM MODEL RS-M85

## Main Control Section




NOTE:

1. S501 ····· Rewind button switch.
2. S502 ····· Fast forward button switch.
3. S503 ····· Playback button switch.
4. S504 ····· Pause button switch.
5. S505 ····· Record button switch.
6. S506 ····· Stop button switch.
7. S507 ····· Cassette detection switch.
8. S508 ····· Accidental erase prevention switch.
9. Resistor values are in ohms (Ω), 1/4 watt unless specified otherwise. K = 1,000 Ω.
10. Capacitor values are in microfarads (μF) unless specified otherwise. P = Pico-farads.
11. All voltage values shown in circuitry are under no signal condition with volume control at minimum position. For measurement, use VTVM.

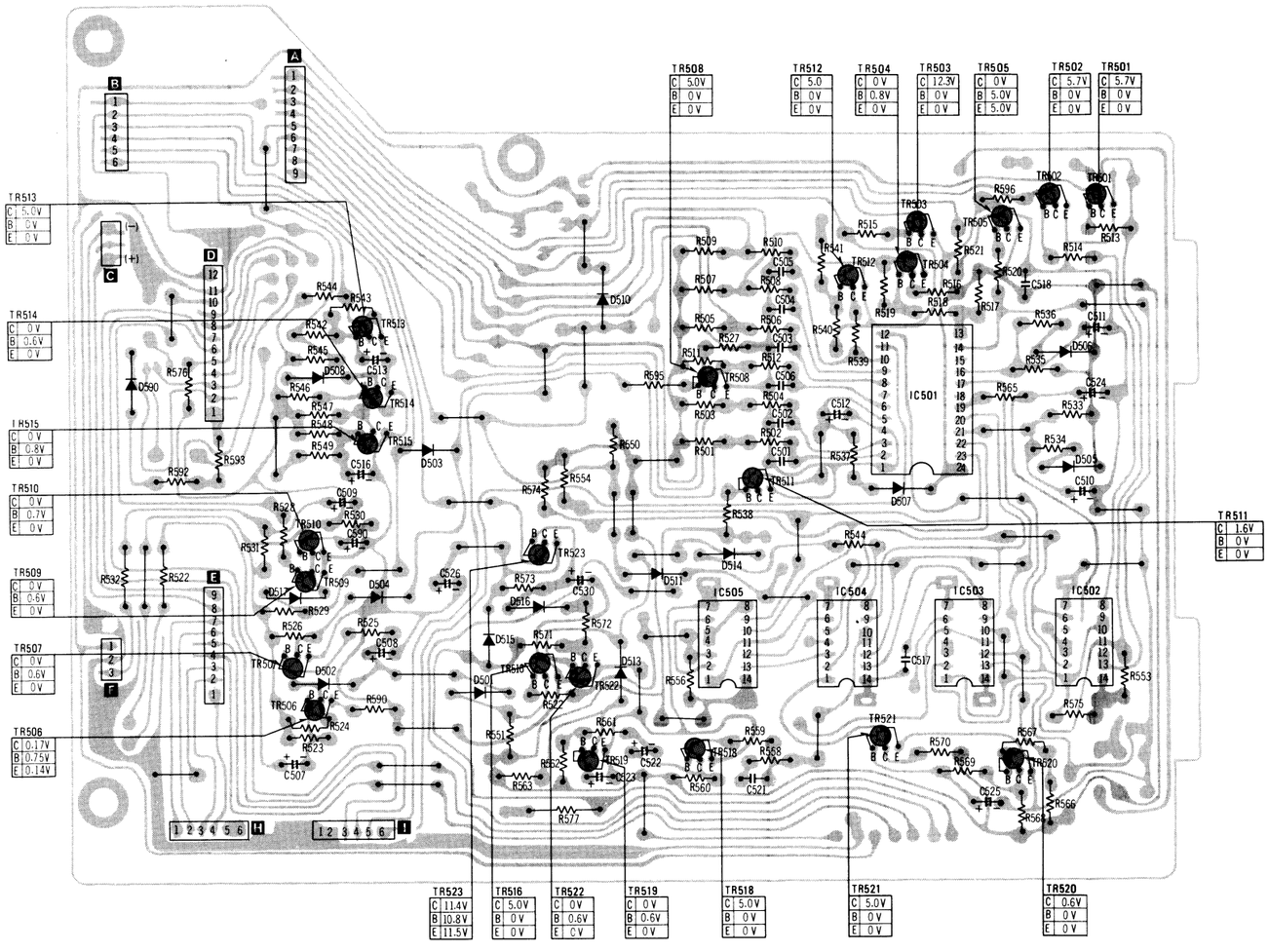
| No. | Part Name & Description |
|---|---|
| | **TRANSFORMERS** |
| T | Headphone Transformer |
| T4X | Power Transformer |
| T4X | " |
| | **COILS** |
| | MPX Filter |
| W | 3mH Coil |
| W | 7mH Coil |
| | Bias Oscillator Coil |
| Y | Choke Coil |
| D | " |
| | **SWITCHES** |
| | Slide Switch (Record/Playback Selector) |
| | Lever Switch |
| | Push Switch (Power ON/OFF) |
| A | " |
| | Voltage Select Switch |
| 506 | |
| I | Control Key Switch |
| | Micro Switch |
| | **PILOT LAMPS** |
| 600W | Pilot Lamp |
| 600 | " |
| | **FUSES** |
| | Mini Fuse (800mAT) |
| R3 | " |
| | Mini Fuse (1AT) |
| | Mini Fuse (1.6AT) |
| | Mini Fuse (315mAT) |

difference between the parts S-M75.

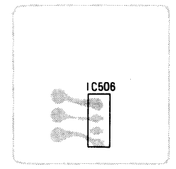
| Part No. | |
|---|---|
| 55 | RS-M75 |
| 21 | ——— |
| 73 | ——— |
| 72 | ——— |
| 25 | ——— |
| 21 | ——— |
| 73 | ——— |
| 21 | ——— |
| 52 | ——— |
| 0KC | ——— |
| 2KZ | ——— |
| 3 | ——— |
| | ——— |
| | ——— |
| | ——— |

# CIRCUIT BOARD

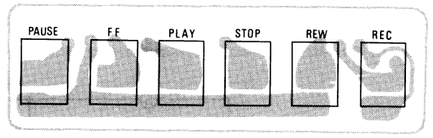
## Main Control


TR508 C 5.0V B 0V E 0V
TR512 C 5.0 B 0V E 0V
TR504 C 0V B 0.8V E 0V
TR503 C 12.3V B 0V E 0V
TR505 C 0V B 5.0V E 0V
TR502 C 5.7V B 0V E 0V
TR501 C 5.7V B 0V E 0V
TR513 C 5.0V B 0V E 0V
TR514 C 0V B 0.6V E 0V
TR515 C 0V B 0.8V E 0V
TR510 C 0V B 0.7V E 0V
TR509 C 0V B 0.6V E 0V
TR507 C 0V B 0.6V E 0V
TR506 C 0.17V B 0.75V E 0.14V
TR511 C 1.6V B 0V E 0V
TR523 C 11.4V B 10.8V E 11.5V
TR516 C 5.0V B 0V E 0V
TR522 C 0V B 0.6V E 0V
TR519 C 0V B 0.6V E 0V
TR518 C 5.0V B 0V E 0V
TR521 C 5.0V B 0V E 0V
TR520 C 0.6V B 0V E 0V
IC501
IC502
IC503
IC504
IC505

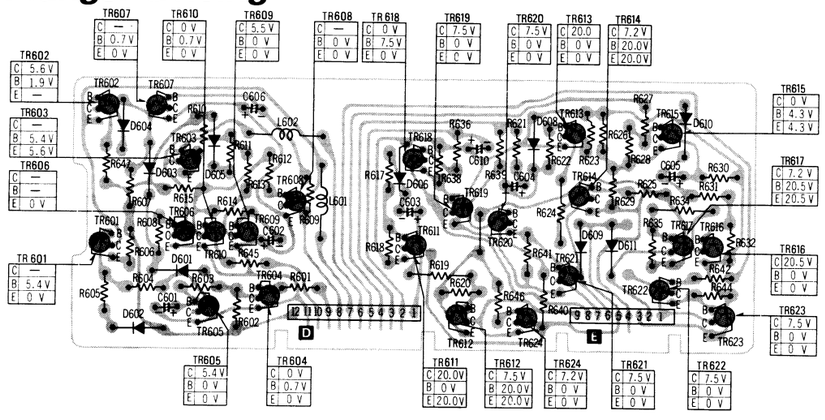
## Hole IC




## Control Key Switch




## Plunger Driving

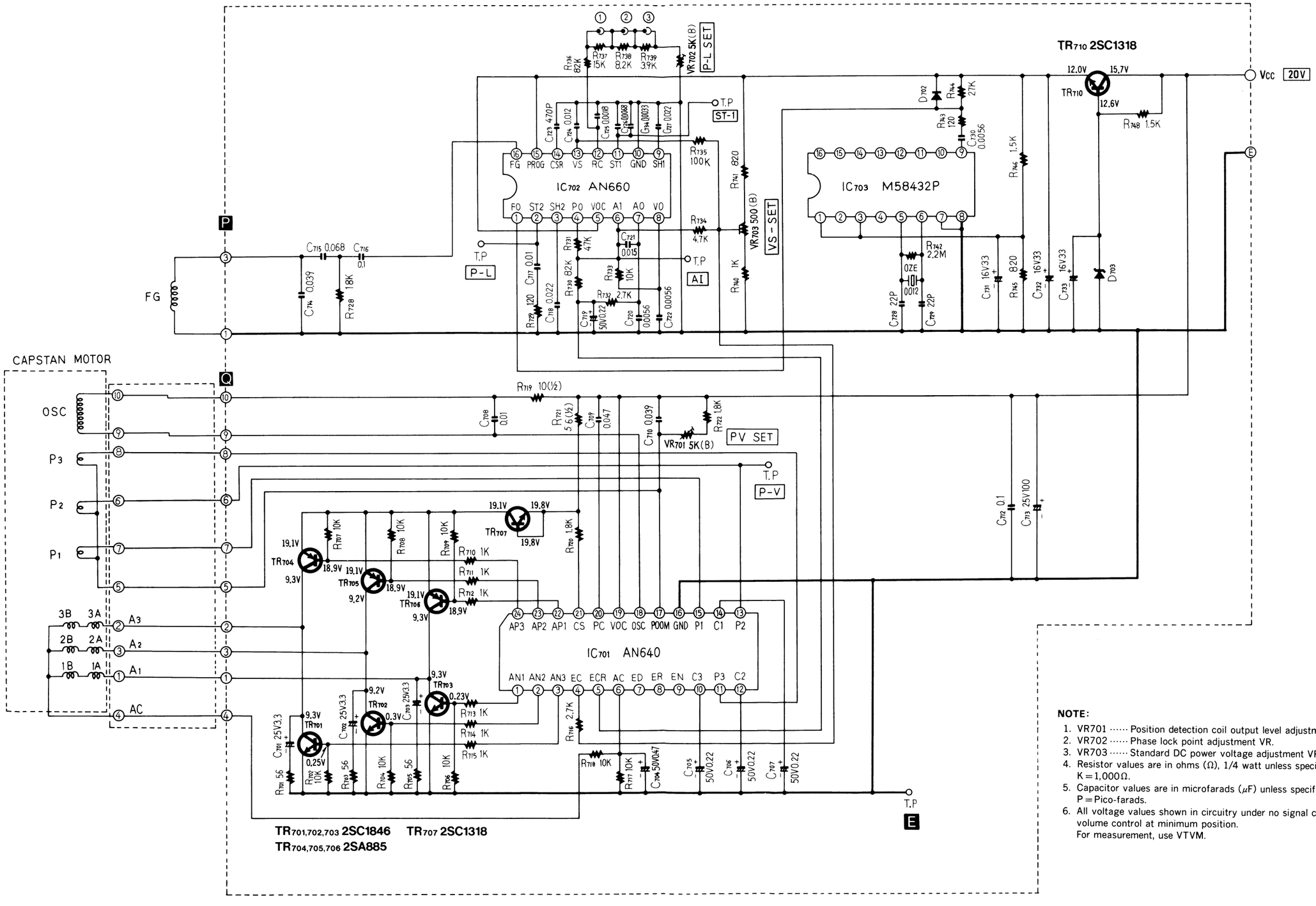

TR607 C — B 0.7V E 0V
TR610 C 0V B 0.7V E 0V
TR609 C 5.5V B 0V E 0V
TR608 C — B 0V E 0V
TR618 C 0V B 7.5V E 0V
TR619 C 7.5V B 0V E 0V
TR620 C 7.5V B 0V E 0V
TR613 C 20.0 B 0V E 0V
TR614 C 7.2V B 20.0V E 20.0V
TR602 C 5.6V B 1.9V E —
TR603 C — B 5.4V E 5.6V
TR606 C — B — E 0V
TR601 C — B 5.4V E 0V
TR615 C 0V B 4.3V E 4.3V
TR617 C 7.2V B 20.5V E 20.5V
TR616 C 20.5V B 0V E 0V
TR623 C 7.5V B 0V E 0V
TR605 C 5.4V B 0V E 0V
TR604 C 0V B 0.7V E 0V
TR611 C 20.0V B 0V E 20.0V
TR612 C 7.5V B 20.0V E 20.0V
TR624 C 7.2V B 0V E 0V
TR621 C 7.5V B 0V E 0V
TR622 C 7.5V B 0V E 0V

**NOTE:**

The circuit shown in red on the conductor is B circuit.
Values indicated in ☐ are DC voltage between the chassis and electrical parts.

# SCHEMATIC DIAGRAM MODEL RS-M85

## Capstan Driving Section

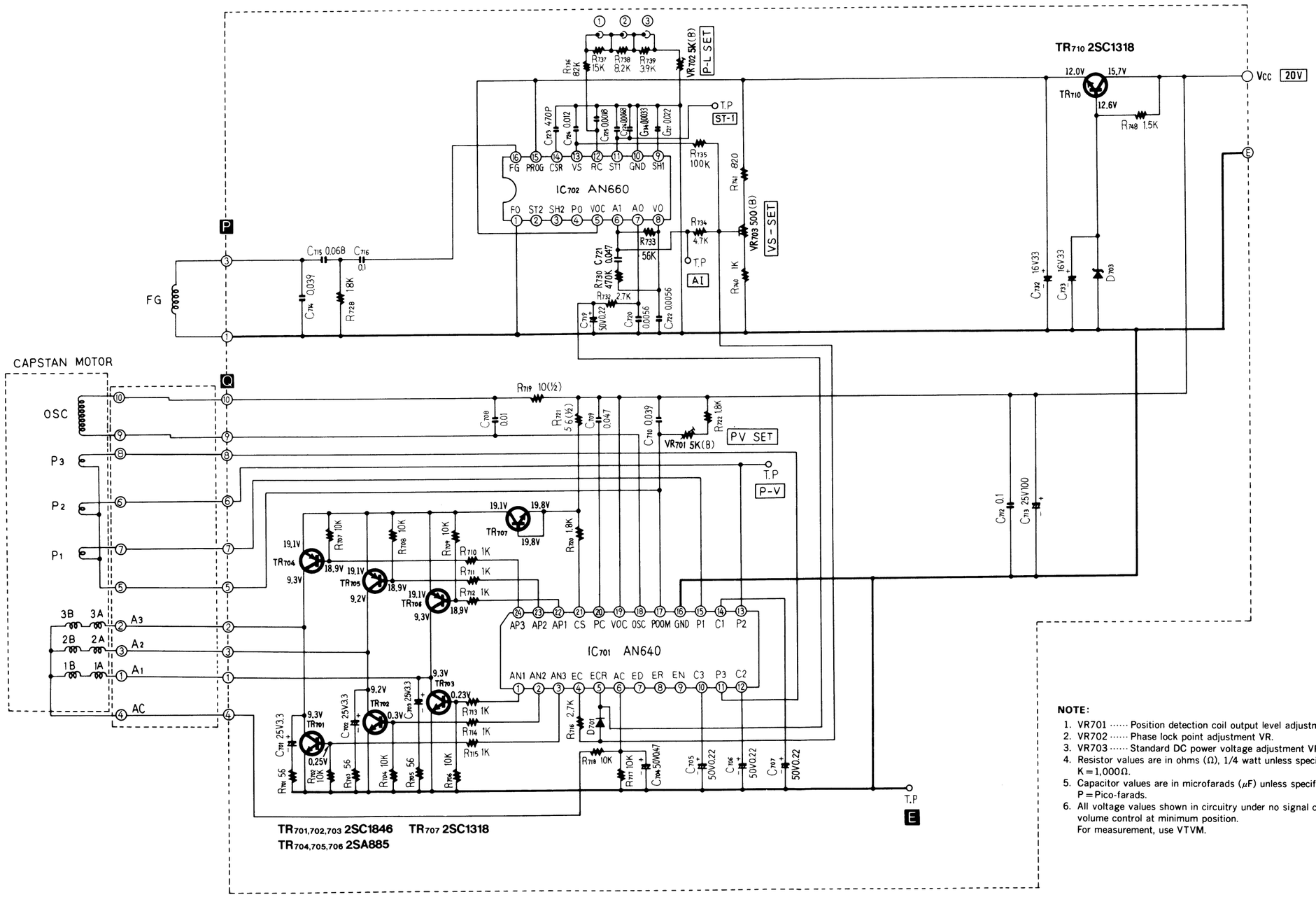



**NOTE:**

1. VR701 ····· Position detection coil output level adjustment VR.
2. VR702 ····· Phase lock point adjustment VR.
3. VR703 ····· Standard DC power voltage adjustment VR.
4. Resistor values are in ohms (Ω), 1/4 watt unless specified otherwise. K = 1,000Ω.
5. Capacitor values are in microfarads (μF) unless specified otherwise. P = Pico-farads.
6. All voltage values shown in circuitry under no signal condition with volume control at minimum position. For measurement, use VTVM.

# SCHEMATIC DIAGRAM MODEL RS-M75

## Capstan Driving Section



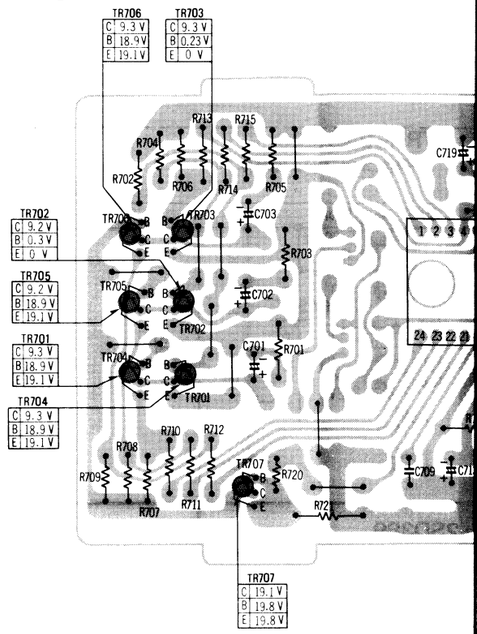

**TR701,702,703 2SC1846 TR707 2SC1318**
**TR704,705,706 2SA885**

**NOTE:**

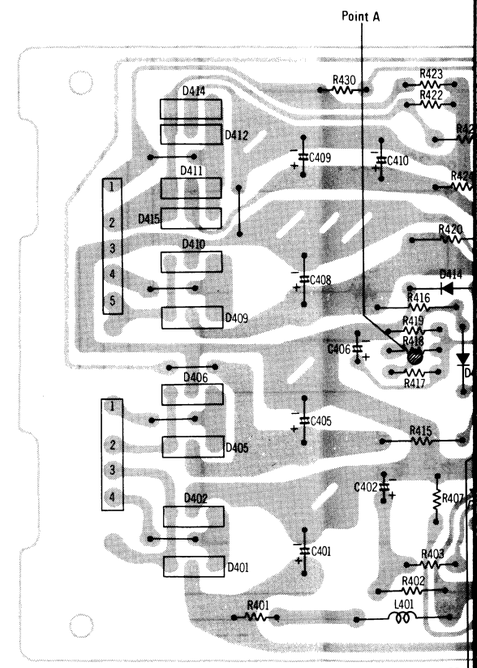
1. VR701 ····· Position detection coil output level adjustment VR.
2. VR702 ····· Phase lock point adjustment VR.
3. VR703 ····· Standard DC power voltage adjustment VR.
4. Resistor values are in ohms (Ω), 1/4 watt unless specified otherwise. K = 1,000Ω.
5. Capacitor values are in microfarads (μF) unless specified otherwise. P = Pico-farads.
6. All voltage values shown in circuitry under no signal condition with volume control at minimum position. For measurement, use VTVM.

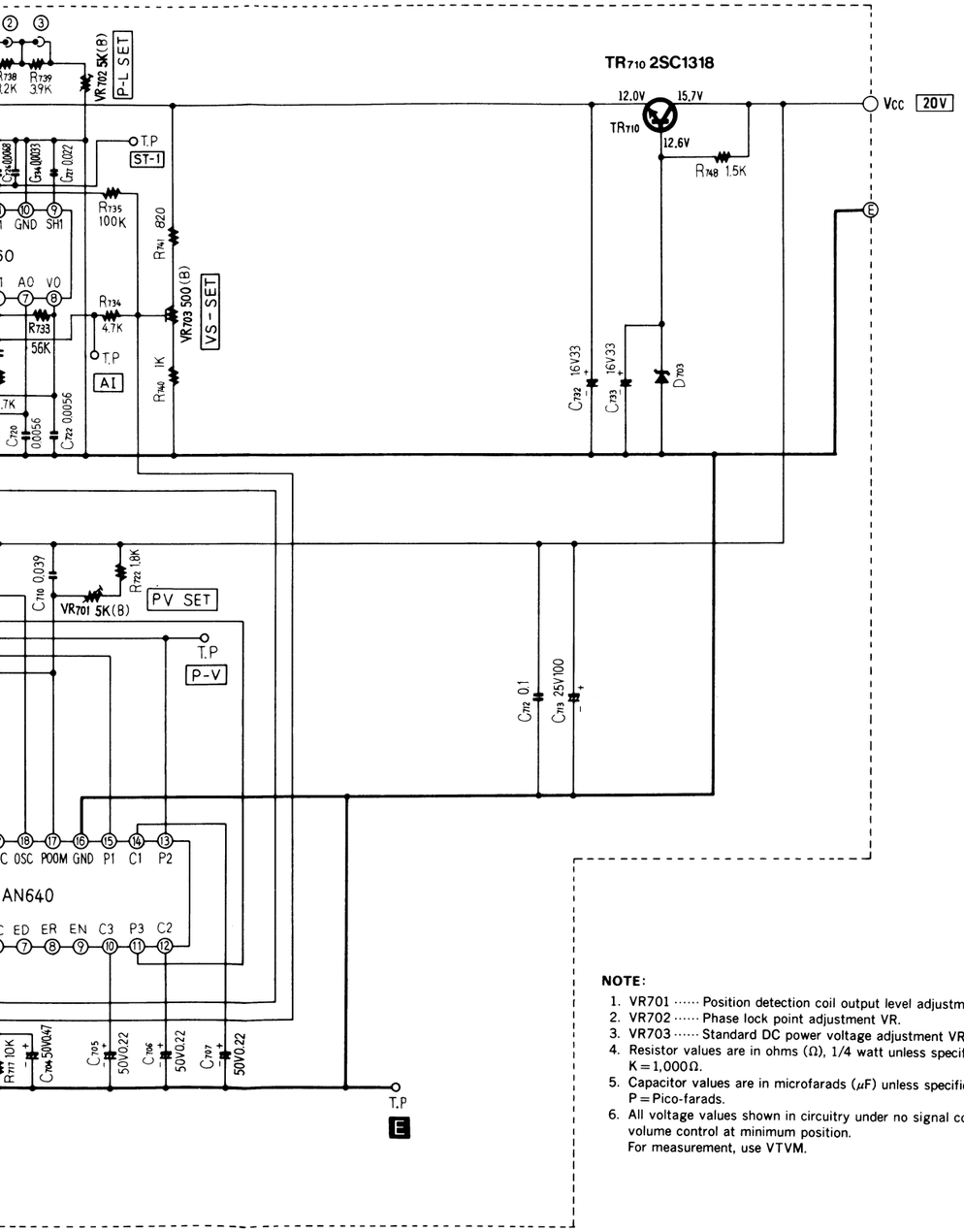
# CIRCUIT BOARD

## Capstan Driving




## Power Supply



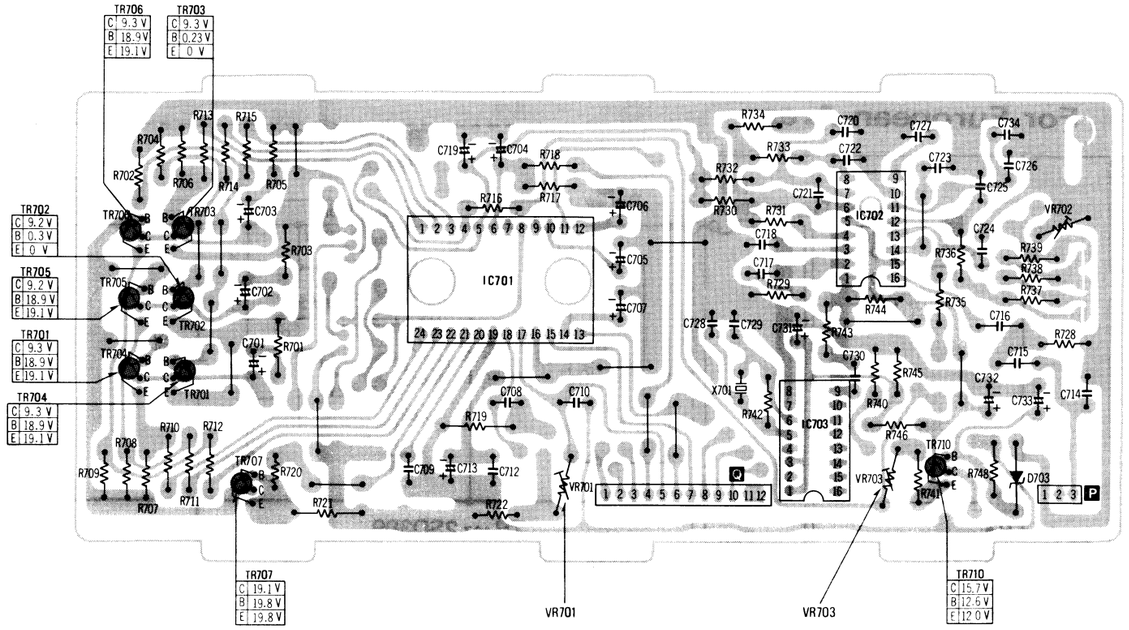



**NOTE:**

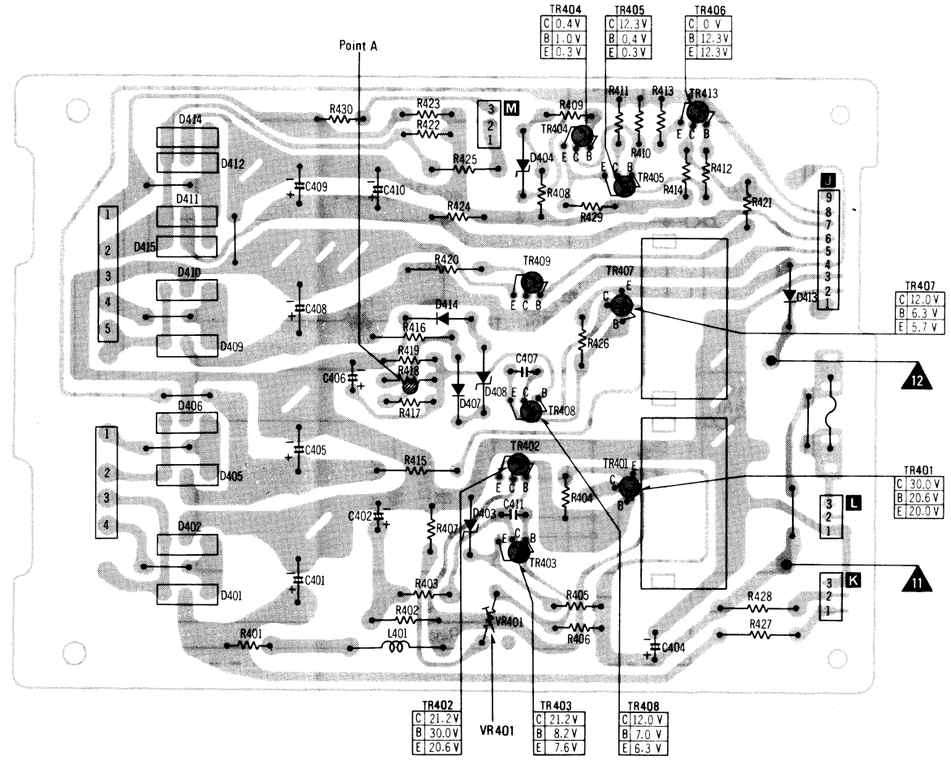
1. VR701 ····· Position detection coil output level adjustment VR.
2. VR702 ····· Phase lock point adjustment VR.
3. VR703 ····· Standard DC power voltage adjustment VR.
4. Resistor values are in ohms (Ω), 1/4 watt unless specified otherwise. K = 1,000Ω.
5. Capacitor values are in microfarads (μF) unless specified otherwise. P = Pico-farads.
6. All voltage values shown in circuitry under no signal condition with volume control at minimum position. For measurement, use VTVM.

# CIRCUIT BOARD

## Capstan Driving




## Power Supply



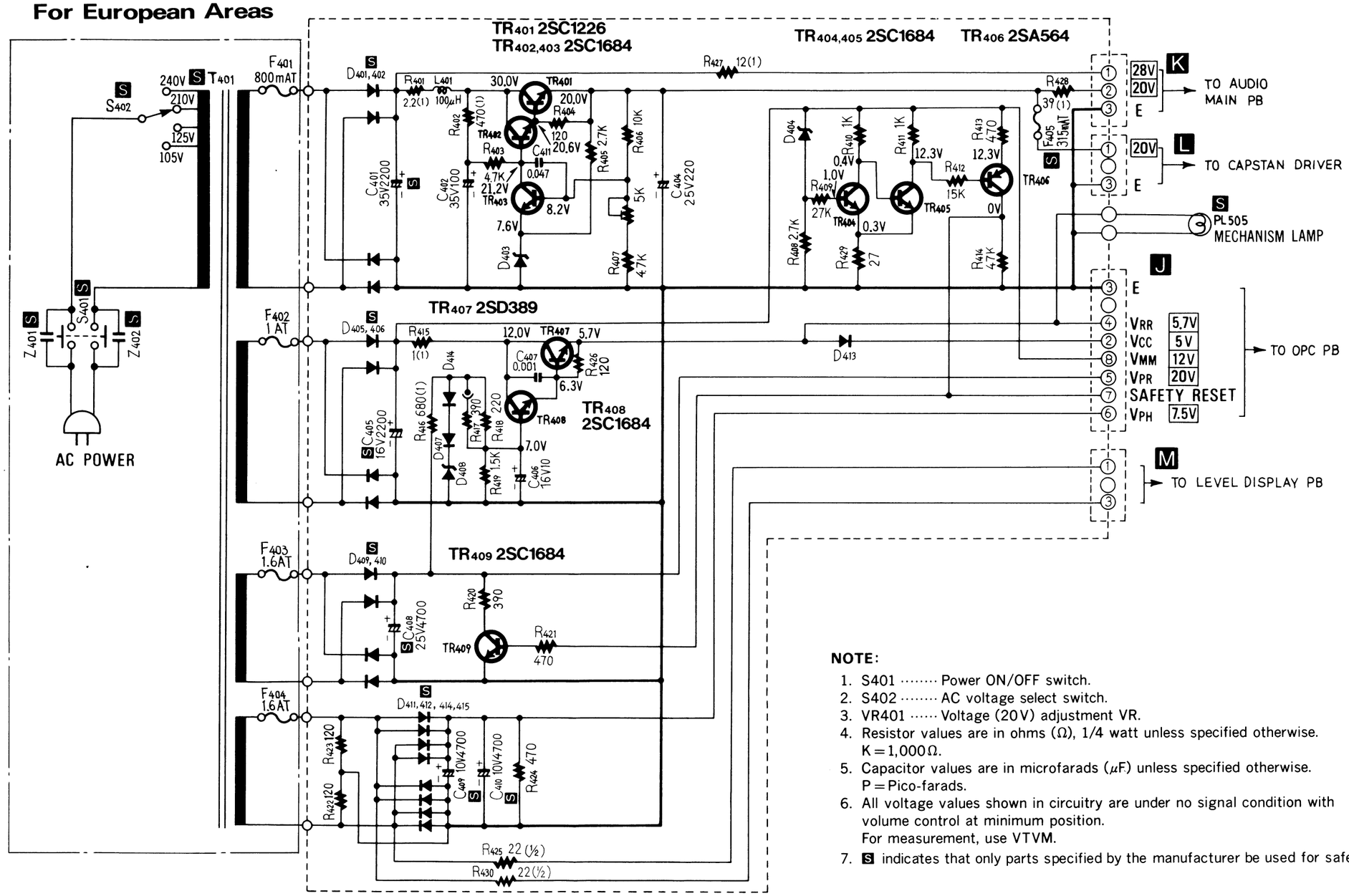

**NOTE:**

The circuit shown in red on the conductor is B circuit.
Values indicated in ▭ are DC voltage between the chassis and electrical parts.

# SCHEMATIC DIAGRAM MODEL RS-M85

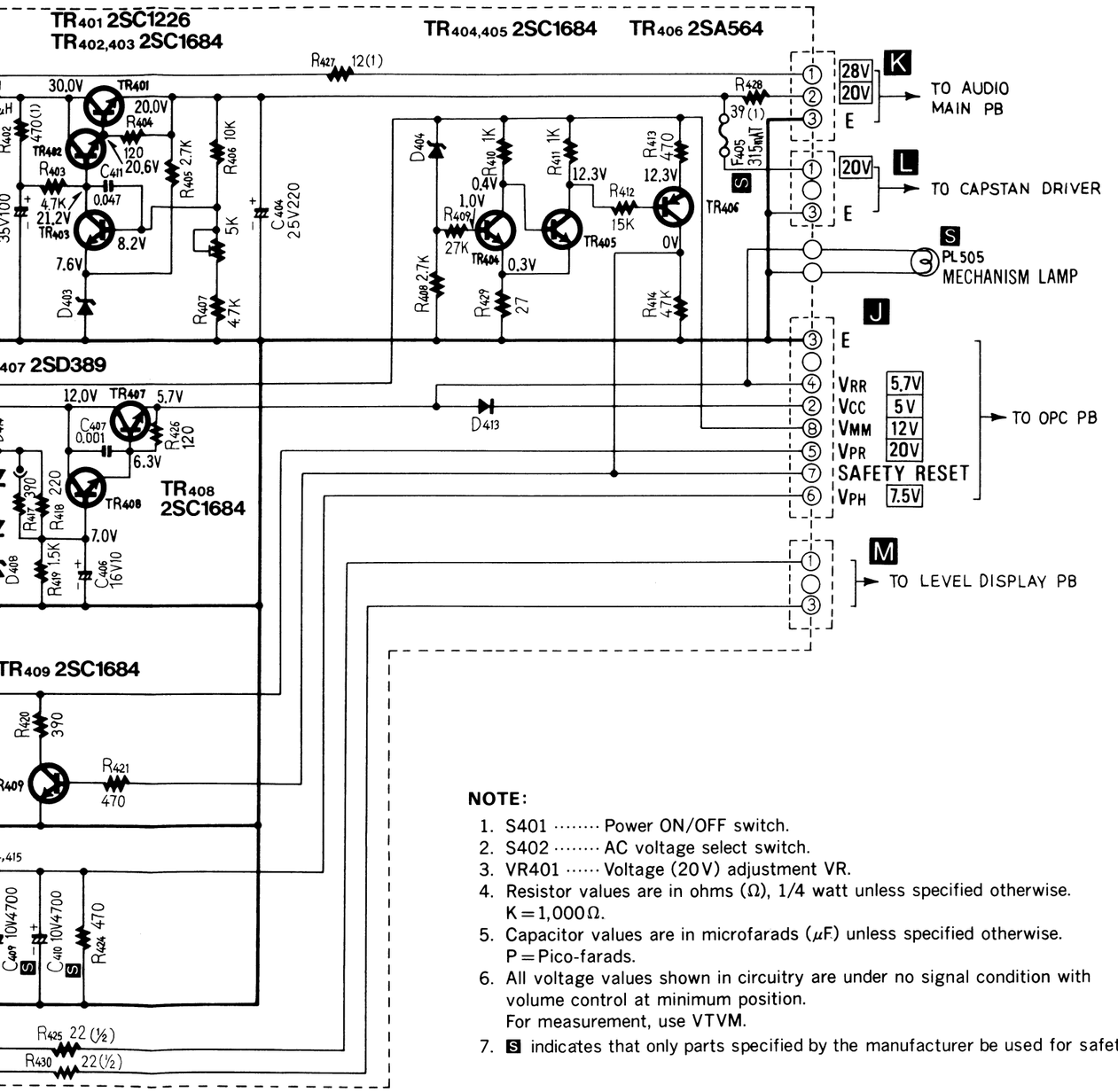
## Power Supply Section

### For European Areas




**NOTE:**

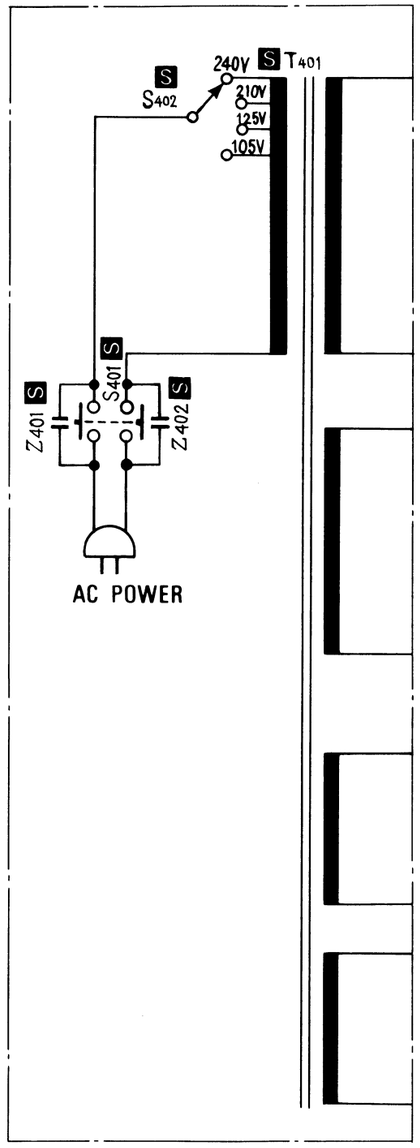
1. S401 ····· Power ON/OFF switch.
2. S402 ····· AC voltage select switch.
3. VR401 ····· Voltage (20V) adjustment VR.
4. Resistor values are in ohms (Ω), 1/4 watt unless specified otherwise.
   K = 1,000Ω.
5. Capacitor values are in microfarads (μF) unless specified otherwise.
   P = Pico-farads.
6. All voltage values shown in circuitry are under no signal condition with volume control at minimum position.
   For measurement, use VTVM.
7. **S** indicates that only parts specified by the manufacturer be used for safety.



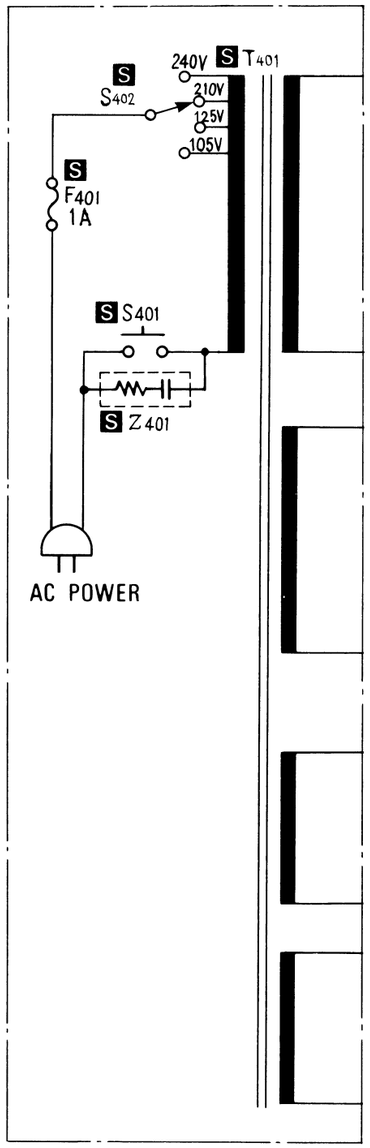

**NOTE:**

1. S401 ····· Power ON/OFF switch.
2. S402 ····· AC voltage select switch.
3. VR401 ····· Voltage (20V) adjustment VR.
4. Resistor values are in ohms (Ω), 1/4 watt unless specified otherwise.
   K = 1,000Ω.
5. Capacitor values are in microfarads (μF) unless specified otherwise.
   P = Pico-farads.
6. All voltage values shown in circuitry are under no signal condition with volume control at minimum position.
   For measurement, use VTVM.
7. **S** indicates that only parts specified by the manufacturer be used for safety.

## For Australia

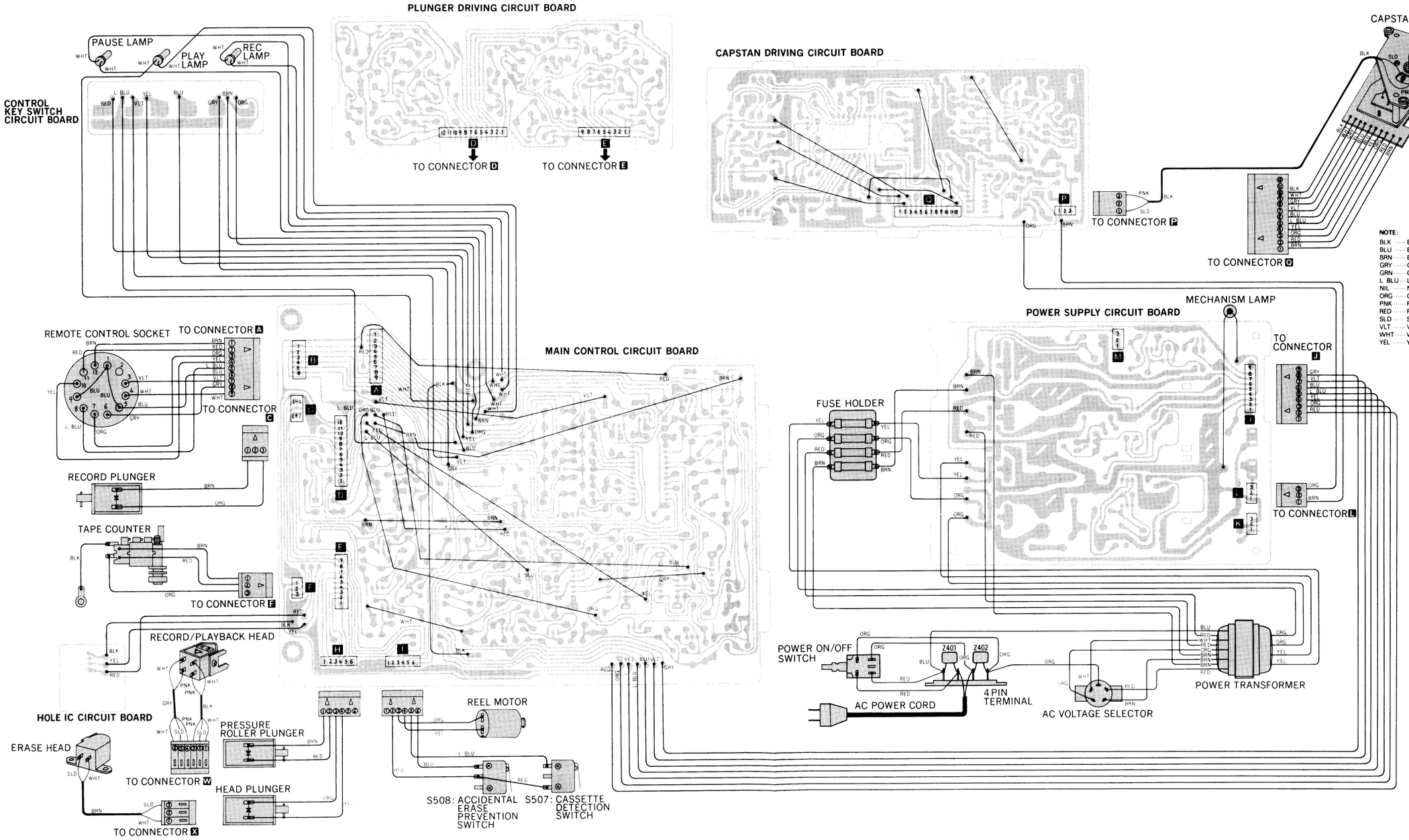



## For Other Areas



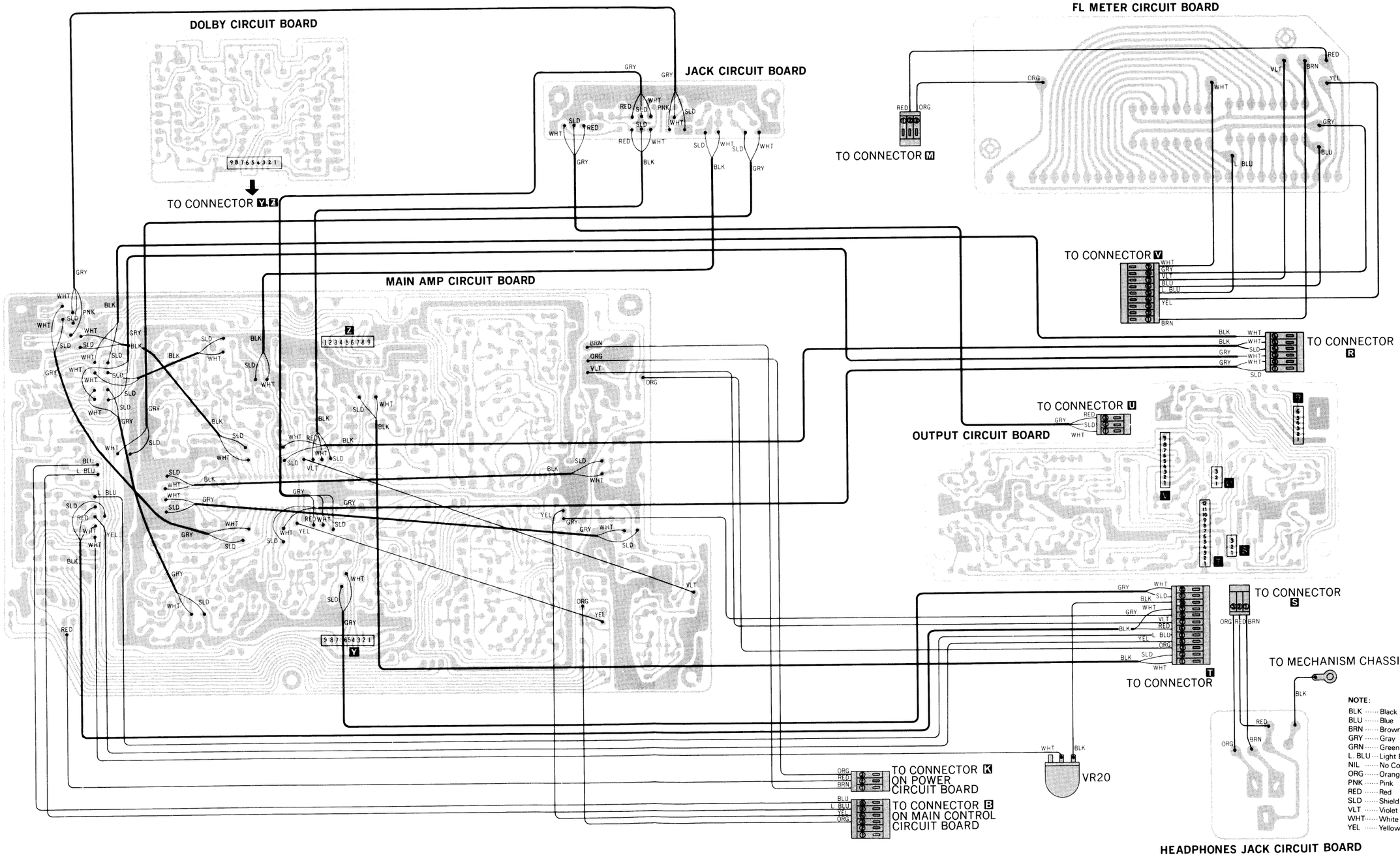
# WIRING CONNECTION DIAGRAM MODEL RS-M85

## Controls Section

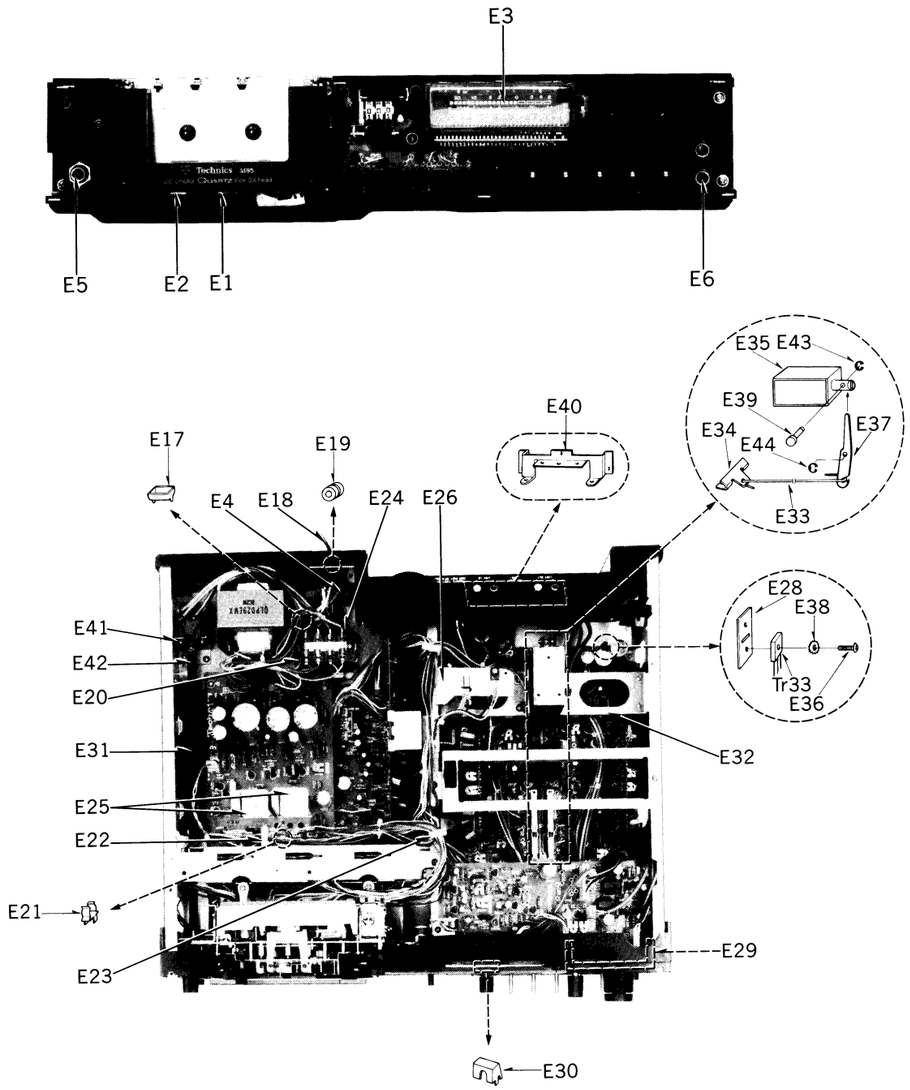


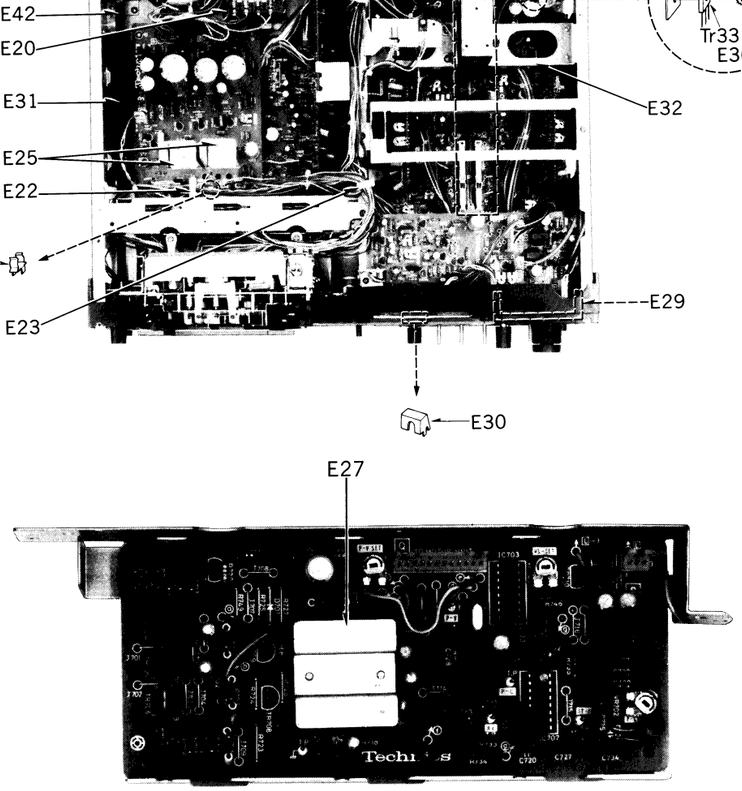
# WIRING CONNECTION DIAGRAM MODEL RS-M85

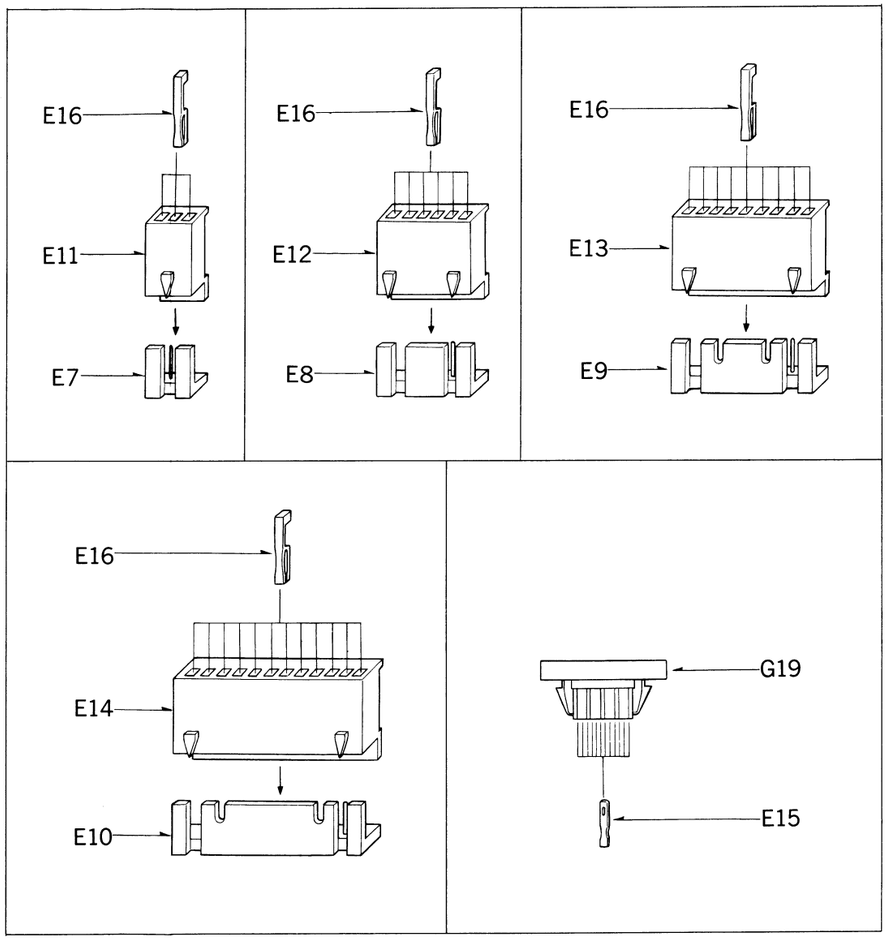
## Amp Section



# ELECTRICAL PARTS LOCATION




**NOTE:** S indicates that only parts specified by the manufacturer be used for safety.

| Ref. No. | | | Part No. | Part Name & Description |
|---|---|---|---|---|
| | | | | **ELECTRICAL PARTS** |
| E1 | | | WY1402Z | Record/Playback Head |
| E2 | | | QWY2122ZA | Erase Head |
| E3 | | | QSLS001RFA | Fluorescent Level Meter |
| E4 | ● | S | QFC1205M | AC Power Cord |
| E4 | □ | S | QFC1204M | " |
| E4 | ○ | S | QFC1208M | AC Power Cord |
| E4 | △ | S | QFC1203M | " |
| E5 | | | QJA0249H | Headphones Jack |
| E6 | | | QJA0444H | Microphone Jack |
| E7 | | | QJP1921TN | 3 Pin Plug |
| E8 | | | QJP1922TN | 6 Pin Plug |
| E9 | | | QJP1923TN | 9 Pin Plug |
| E10 | | | QJP1924TN | 12 Pin Plug |
| E11 | | | QJS1921TN | 3 Pin Socket |
| E12 | | | QJS1922TN | 6 Pin Socket |
| E13 | | | QJS1923TNL | 9 Pin Socket |
| E14 | | | QJS1924TNL | 12 Pin Socket |
| E15 | | | QJT1053 | Contact-A |
| E16 | | | QJT1054 | Contact-B |
| E17 | | | QTW1118 | Spark Killer Cover |
| E18 | ●□ ○ | S | QBJ1425 | AC Cord Bushing |
| E18 | △ | S | QTD1129 | " |
| E19 | ●□ ○ | | QTD1164 | AC Cord Clamper |
| E20 | ●□ | S | QTF1039 | Fuse Holder |
| E20 | △ | S | QTF1033 | " |
| E21 | ●□ | | QTF1054 | Fuse Holding Terminal |
| E22 | | | QTD1244XN | Wire Clamper-S |
| E23 | | | QTD1250XN | Wire Clamper-L |
| E24 | ●□ ○ | | QJT4017 | 4 Pin Terminal |
| E25 | | | QTH1088 | Heat Sink |
| E26 | ●□ | | QMF1980 | " |
| E27 | | | QTH1136 | " |
| E28 | | | QTH1118 | " |
| E29 | | | QTS1423 | Shield Plate |
| E30 | | | QTS1424 | " |
| E31 | | | QXR0385 | Power Switch Rod Assembly |
| E32 | | | QXA0661 | Record/Playback Angle Assembly |
| E33 | | | QBS1116 | Record/Playback Rod |
| E34 | | | QML3283 | Record/Playback Lever |
| E35 | | | QME0141 | Record Plunger |
| E36 | | | XSN26+8 | Screw +2.6×8 |
| E37 | | | QML3281 | Record Lever |
| E38 | | | XWC26 | Lock Washer |
| E39 | | | QMN2095 | Plunger Pin |
| E40 | | | QMA3300 | Jack Angle |
| E41 | | | QMA3297 | Power Switch Angle |
| E42 | | | QKJ0242 | Cap |
| E43 | | | XUC25FT | Stop Ring 2.5φ |
| E44 | | | XUC3FT | Stop Ring 3φ |

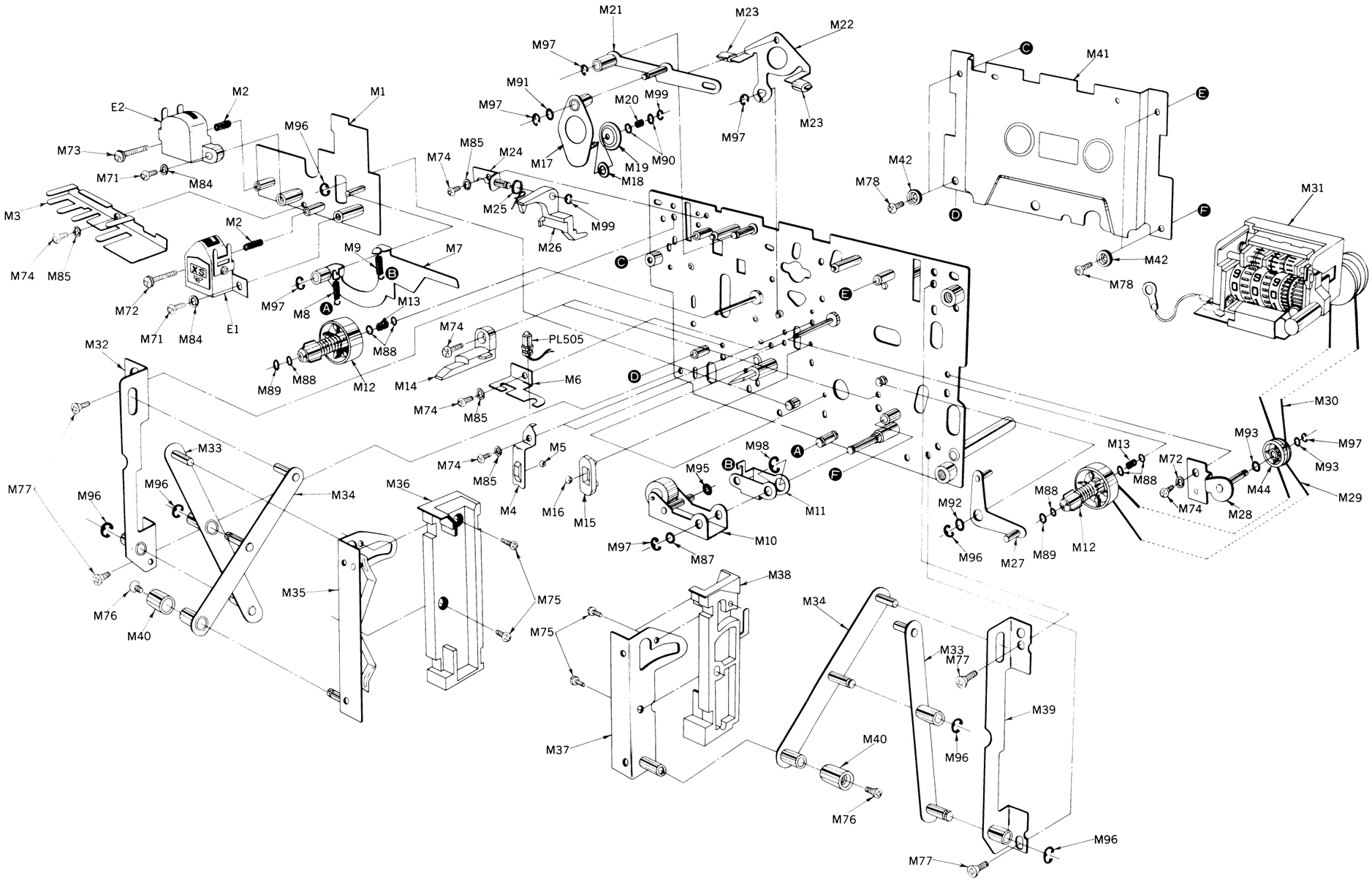
The following shows the difference between the parts of model RS-M85 and RS-M75.

| Ref. No. | Part Name & Description | Part No. RS-M85 | Part No. RS-M75 | Remarks |
|---|---|---|---|---|
| E15 | Contact A | QJT1053 | | |
| E31 | Power Switch Rod Assembly | QXR0385 | QXR0385 | for Black Face Unit |
| | | | QXR0424 | for Silver Face Unit |

# EXPLODED VIEWS

The following shows the difference between the parts of model RS-M85 and RS-M75.

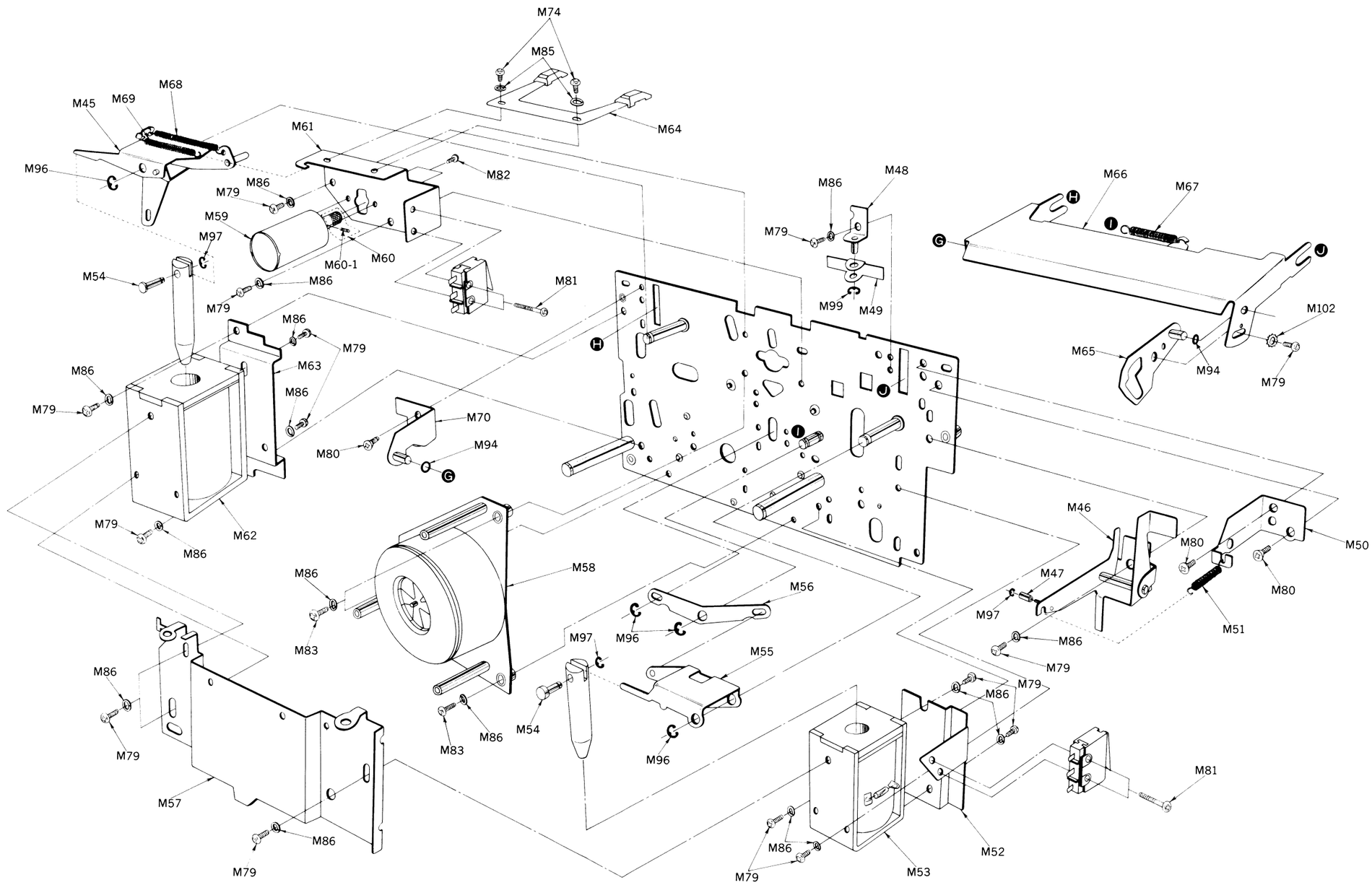
| Ref. No. | Part Name & Description | Part No. | | Remarks |
|---|---|---|---|---|
| | | RS-M85 | RS-M75 | |
| M31 | Tape Counter Assembly | QXC0021 | QXC0021 | for Black Face Unit |
| | | | QXC0029 | for Silver Face Unit |




| Ref. No. | Part No. | Part Name & Description |
|---|---|---|
| | | **MECHANICAL PARTS** |
| M1 | QXK2029 | Head Base Plate Assembly |
| M2 | QBCA0008 | Head Spring |
| M3 | QTD1261 | Head Wires Clamper |
| M4 | QBP1733 | Steel Ball Holder-A |
| M5 | QDK1012 | Steel Ball 2.5φ |
| M6 | QMA3321 | Lamp Angle |
| M7 | QXL1168 | Pressure Roller Lever Assembly |
| M8 | QBT1490 | Eject Lever Spring |
| M9 | QBT1441 | Pressure Roller Spring |
| M10 | QXL1166 | Pressure Roller Assembly |
| M11 | QML3267 | Pressure Roller Lever-1 |
| M12 | QXD0087 | Reel Table |
| M13 | QBC1272 | Back Tension Spring |
| M14 | QMG0054 | Cassette Guide |
| M15 | QMH2009 | Steel Ball Holder-B |
| M16 | QDK1006 | Steel Ball 3φ |
| M17 | QXL1189 | Idler Lever Assembly |
| M18 | QBF1260 | Idler Felt |
| M19 | QXI0101 | Idler Assembly |
| M20 | QBC1308 | Idler Spring |
| M21 | QXL1164 | Brake Lever Assembly |
| M22 | QML3273 | Brake |
| M23 | QBG1132 | Stopper Rubber |
| M24 | QXA0714 | Detection Angle Assembly |
| M25 | QBN1573 | Detection Lever Spring |
| M26 | QML3285 | Detection Lever |
| M27 | QXL1172 | Lever-A Assembly |
| M28 | QXA0712 | Pulley Angle Assembly |
| M29 | QDB0218 | Counter Belt-A |
| M30 | QDB0234 | Counter Belt-B |
| M31 | QXC0021 | Tape Counter Assembly |
| M32 | QXA0703 | Angle-L Assembly |
| M33 | QXL1191 | Link Lever-A Assembly |
| M34 | QXL1190 | Link Lever-B Assembly |
| M35 | QXA0706 | Holder Angle-L Assembly |
| M36 | QMH2027 | Cassette Holder-L |
| M37 | QXA0705 | Holder Angle-R Assembly |
| M38 | QMH2028 | Cassette Holder-R |
| M39 | QXA0704 | Angle-R Assembly |
| M40 | QKJ0245 | Spacer-A |
| M41 | QXH0286 | Mechanism Cover |
| M42 | QMZ1213 | Spacer-B |
| M43 | QBP1135 | Spring Washer |
| M44 | QDP1753 | Connection Pulley |
| M45 | QXL1165 | Lever-B Assembly |
| M46 | QXL1188 | Eject Lever Assembly |
| M47 | QDP1758 | Roller |
| M48 | QXA0713 | Angle Assembly |
| M49 | QML3284 | Release Lever |
| M50 | QMA3314 | Connector Angle |
| M51 | QBT1753 | Playback Lever Spring |
| M52 | QMA3311 | Plunger Angle-L |
| M53 | QME0141 | Plunger |
| M54 | QMN2095 | Plunger Pin |
| M55 | QXL1171 | Plunger Lever-L Assembly |
| M56 | QML3276 | Plunger Lever |
| M57 | QMA3322 | Reinforcement Angle |
| M58 | QXK2010 | Capstan Motor Assembly |
| M59 | MKCN22AE5 | Reel Motor |
| M60 | QXP0574 | Motor Pulley Assembly |
| M60-1 | XXE26D3FZ | Set Screw |

# EXPLODED VIEWS

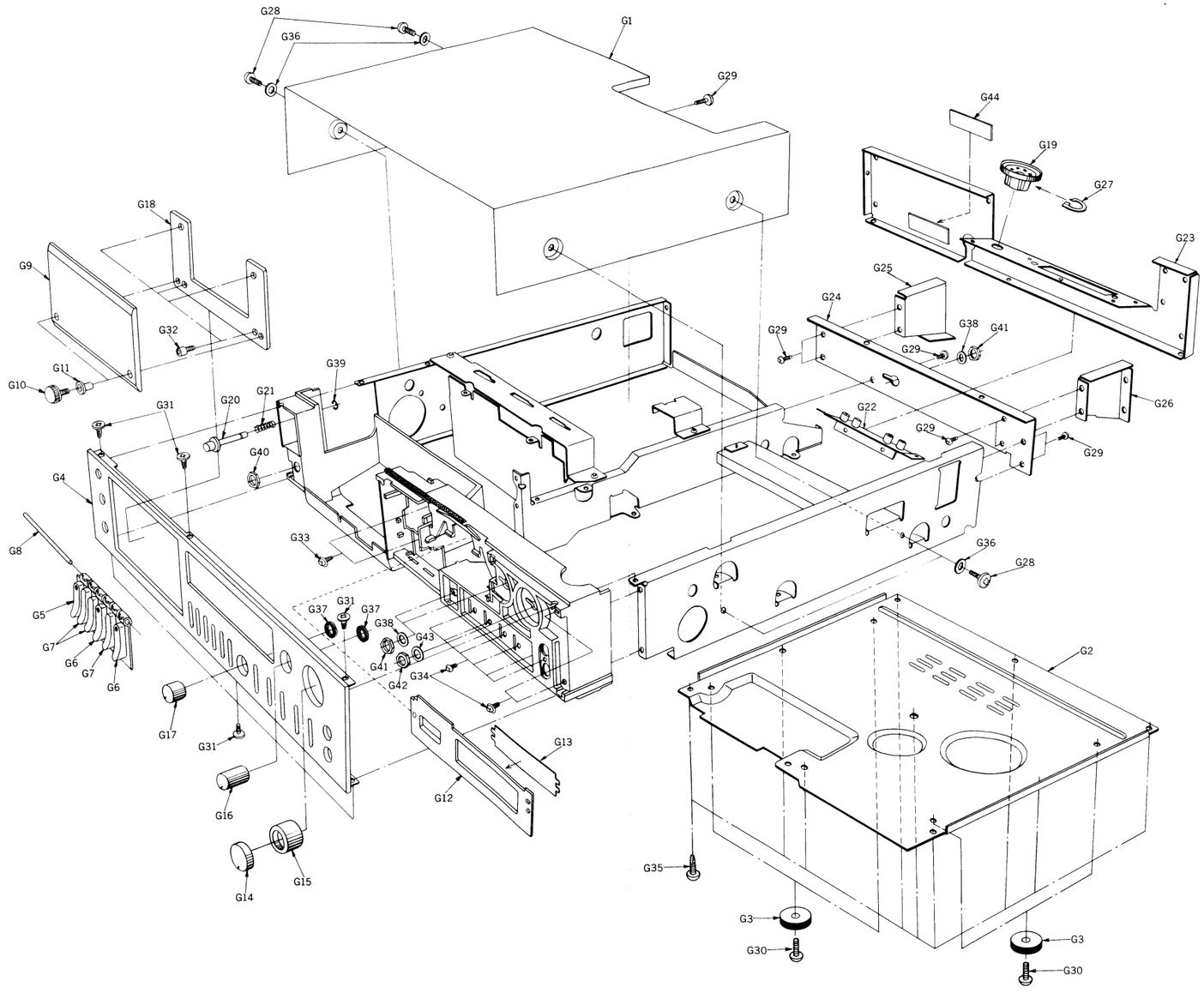
| Ref. No. | Part No. | Part Name & Description |
|---|---|---|
| M61 | QMA3313 | Motor Angle |
| M62 | QXE0243 | Plunger |
| M63 | QMA3312 | Plunger Angle-R |
| M64 | QXH0276 | Cassette Holding Cushion |
| M65 | QXL1173 | Lock Lever Assembly |
| M66 | QML3282 | Connector Lever |
| M67 | QBT1553 | Holder Spring-R |
| M68 | QBT1405 | Lever Spring |
| M69 | QBT1713 | Record Spring |
| M70 | QXA0702 | Connector Angle-R Assembly |
| M71 | XSN2+6 | Screw +2×6 |
| M72 | QHQ1211 | Head Adjustment Screw |
| M73 | QHQ1230 | " |
| M74 | XSN26+4 | Screw +2.6×4 |
| M75 | XSN26+4BVS | Screw +2.6×4 |
| M76 | XSS2+4 | Screw +2×4 |
| M77 | XSS3+4S | Screw +3×4 |
| M78 | QHQ1185 | Step Screw |
| M79 | XSN3+5S | Screw +3×5 |
| M80 | XSS3+6S | Screw +3×6 |
| M81 | QHQ1182 | Step Screw |
| M82 | XSN2+3 | Screw +2×3 |
| M83 | XSN3+8S | Screw +3×8 |
| M84 | XWA2 | Spring Washer 2φ |
| M85 | XWA26 | Spring Washer 2.6φ |
| M86 | XWA3 | Spring Washer 3φ |
| M87 | QBW2016 | Poly Washer |
| M88 | QBW2012 | " |
| M89 | QBW2008 | " |
| M90 | QBW2015 | " |
| M91 | QBW2017 | " |
| M92 | QBW2018 | " |
| M93 | QBW2016 | Poly Washer |
| M94 | QBW2019 | " |
| M95 | QBK7123 | Fiber Washer |
| M96 | XUC3FT | Stop Ring 3φ |
| M97 | XUC25FT | Stop Ring 2.5φ |
| M98 | XUC5FT | Stop Ring 5φ |
| M99 | XUC2FT | Stop Ring 2φ |
| M100 | XSN26+6 | Screw +2.6×6 |
| M101 | XWG26 | Flat Washer |
| M102 | XWC3 | Lock Washer |



# CABINET PARTS

**NOTE:** Symbols after Ref. No. indicate;
●·····for United Kingdom
□·····for other European areas
○·····for Australia
△·····for other areas without European
Ref. No. without symbols apply to all areas.

| Ref. No. | Part No. | Part Name & Description |
|---|---|---|
| | | **CABINET PARTS** |
| G1 | QGC1102 | Case Cover |
| G2 | QGC1089 | Bottom Cover |
| G3 | QKA1076 | Rubber Foot |
| G4 | QYP0737 | Front Panel Assembly |
| G5 | QXB0528 | Control Button (REC) |
| G6 | QXB0529 | Control Button (PLAY, PAUSE) |
| G7 | QGO1416 | Control Button (FF, REW, STOP) |
| G8 | QMN2266 | Button Shaft |
| G9 | QGK2804 | Cassette Lid |
| G10 | QHQ1272 | Cassette Lid Holder |
| G11 | QBG1551 | Rubber Cushion |
| G12 | QKJ0246 | Meter Cover A |
| G13 | QGL1130 | Meter Cover B |
| G14 | QYT0465 | Volume Knob A Assembly |
| G15 | QYT0466 | Volume Knob B Assembly |
| G16 | QYT0456 | Volume Knob Assembly |
| G17 | QYT0467 | Volume Knob C Assembly |
| G18 | QGK2887 | Cassette Lid Holding Plate |
| G19 | QJS0803X | Remote Control Socket |
| G20 | QXB0527 | Eject Button Assembly |
| G21 | QBC1216 | Eject Button Spring |
| G22 | QEJ5002HA | Jack Board Assembly |
| G23 | QMK1725 | Back Cover A |
| G24 | QMA3305 | Back Cover B |
| G25 | QMA3306 | Back Cover Holder R |
| G26 | QMA3307 | Back Cover Holder L |
| G27 | QMA3445 | Socket Angle |
| G28 | XSB4+8BVS | Screw ⊕4×8 |
| G29 | XTN3+8B | Tapping Screw ⊕3×8 |
| G30 | XSN4+6S | Screw ⊕4×6 |
| G31 | XSS3+8S | Screw ⊕3×8 |
| G32 | XVE26C4FZ | Screw |
| G33 | XTN3+6B | Tapping Screw ⊕3×6 |
| G34 | XSN3+6BVS | Screw ⊕3×6 |
| G35 | XTN4+8B | Tapping Screw ⊕4×8 |
| G36 | XWG4FZ | Flat Washer 4φ |
| G37 | QBJT0017 | Button Cover |
| G38 | XWS8AW | Washer 8φ |
| G39 | XUC25FT | Stop Ring 2.5φ |
| G40 | QNQ1051 | Nut |
| G41 | QNQ1004 | 〃 |
| G42 | QNQ1039 | 〃 |
| G43 | XWS9AW | Washer 9φ |
| G44 ●○ | QGS2527 | Name Plate |
| G44 □ | QGS2526 | 〃 |
| G44 △ | QGS2553 | 〃 |
| | | **ACCESSORIES** |
| A1 | RP023A | Connection Cord |
| A2 | QFT6TCJNTBFZ | Demonstration Tape |
| A3 △ | QJP0603S | AC Plug Adaptor |
| A4 □○ | QQT2271 | Instruction Book |
| A4 ● | QQT2272 | 〃 |
| A4 △ | QQT2295 | 〃 |
| | | **PACKINGS** |
| P1 ●□○ | QPN3699 | Inside Carton |
| P1 △ | QPN3723 | 〃 |
| P2 | QPA0376 | Inner Cushion A (Left) |
| P3 | QPA0377 | Inner Cushion A (Right) |
| P4 | QPA0378 | Inner Cushion B (Left) |
| P5 | QPA0379 | Inner Cushion B (Right) |
| P6 | QPA0380 | Spacer (Bottom Side) |
| P7 | QPA0381 | Spacer (Top Side) |
| P8 | XZB50X65A04 | Poly Bag |




The following shows the difference between the parts of model RS-M85 and RS-M75.

| Ref. No. | Part Name & Description | Part No. RS-M85 | Part No. RS-M75 | Remarks |
|---|---|---|---|---|
| G1 | Case Cover | QGC1102 | QGC1102 | for Black Face Unit |
| | | | QGC1116 | for Silver Face Unit |
| G4 | Front Panel Assembly | QYP0737 | QYP0737 | for Black Face Unit |
| | | | QYP0771 | for Silver Face Unit |
| G10 | Cassette Lid Holder | QHQ1272 | QHQ1272 | for Black Face Unit |
| | | | QHQ1280 | for Silver Face Unit |
| G12 | Meter Cover A | QKJ0246 | QKJ0246 | for Black Face Unit |
| | | | QKJ0313 | for Silver Face Unit |
| G14 | Volume Knob A Assembly | QYT0465 | QYT0465 | for Black Face Unit |
| | | | QYT0494 | for Silver Face Unit |
| G15 | Volume Knob B Assembly | QYT0466 | QYT0466 | for Black Face Uni |
| | | | QYT0495 | for Silver Face Unit |
| G16 | Volume Knob Assembly | QYT0456 | QYT0456 | for Black Face Unit |
| | | | QYT0497 | for Silver Face Unit |
| G17 | Volume Knob | QYT0467 | QYT0467 | for Black Face Unit |
| | | | QYT0496 | for Silver Face Unit |
| G18 | Cassette Lid Holding Plate | QGK2887 | QGK2888 | for Black Face Unit |
| | | | QGK2904 | for Silver Face Unit |
| G19 | Remote Control Socket | QJS0803X | | |
| G20 | Eject Button Assembly | QXB0527 | QXB0527 | for Black Face Unit |
| | | | QXB0577 | for Silver Face Unit |
| G23 | Back Cover A | QMK1725 | QMK1734 | |
| G27 | Socket Angle | QMA3445 | | |
| G28 | Screw | XSB4+8BVS | XSB4+8BVS | for Black Face Unit |
| | | | XSB4+8FCS | for Silver Face Unit |
| G32 | 〃 | XVE26C4FZ | XVE26C4FZ | for Black Face Unit |
| | | | XVE26A4FN | for Silver Face Unit |
| G36 | Flat Washer | XWG4FZ | XWG4FZ | for Black Face Unit |
| | | | XWG4FC | for Silver Face Unit |
| G44 ● | Name Plate | QGS2527 | QGS2561 | |
| G44 □ | 〃 | QGS2526 | QGS2560 | |
| A4 ● | Instruction Book | QQT2272 | QQT2331 | |
| A4 □ | 〃 | QQT2271 | QQT2396 | |
| P1 | Inside Carton | QPN3699 | QPN3785 | |

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